



DEPARTMENT OF POLITICAL SCIENCE  
CENTRE FOR EUROPEAN STUDIES  
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# EU ETS VS. CORSIA

A neoliberal institutionalist study of European  
emission reduction policy

**Tobias Eriksson**

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Supervisor:	Karolina Engquist Källgren

## **Abstract**

Since 2012, the European aviation sector is covered by the European Union Emission Trading Scheme, (EU ETS). A global counterpart, which is currently being developed by the International Civil Aviation Organization (ICAO) under the name CORSIA, is due to enter into force in 2021. Over 70 countries, including the EU member states, have announced their participation in the scheme. CORSIA has, however, been criticised for its voluntary nature and weak environmental standards. Drawing on neoliberal institutionalist assumptions, this study will provide an understanding of why the European Commission has decided to support a transition from the EU ETS to CORSIA, despite the risk that this would undermine the EU's common environmental targets. In addition to providing an understanding of the Commission's standpoint, this study will seek to contribute to the further development of neoliberal institutionalism. By applying a neoliberal institutionalist framework in combination with the method of qualitative concept analysis on the empirical data, consisting of different materials produced by the Commission, the study shows that the Commission's support for a transition from the EU ETS towards CORSIA could be explained by neoliberal institutionalist assumptions about mutual interests and interdependence. However, this study suggest that to make the theoretical framework better fit for this study and similar studies, the analytical framework must recognise both state and non-state actors and take the temporal aspect of interests into account.

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## **Acronyms**

### Organisations

CORSIA - Carbon Offsetting and Reduction Scheme for International Aviation

EEA - European Economic Area

EU - European Union

EU ETS - EU Emission Trading Scheme

ICAO - International Civil Aviation Organizations

### Other acronyms

ETS - Emission Trading Schemes

GHG - Green House Gas

MEP - Member of the European Parliament

MRV - Monitoring, reporting and verification

NDC - National Determined Contribution

SARPs - Standards and Recommended Practices

## **Introduction**

At a time where climate change is becoming increasingly debated, new research and emission reduction measures are developed, the formation of global environmental institutions is more relevant than ever before. In recent years the development of global and regional instruments for aviation emission reduction has begun. In this context, the EU introduced its Emission trading scheme in 2005, with the purpose of reducing green house gas (GHG) emissions released by companies, covering many different sectors.<sup>1</sup> In parallel to the EU ETS, the initiative was taken by the International Civil Aviation Organization (ICAO) to develop the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

The EU has for many years worked for an expansion of the EU ETS. It has also showed its interest for a global scheme and supported the development of CORSIA. The decision to support this global scheme is the specific focus of this research. What makes this puzzling is the fact that CORSIA is a voluntary scheme with rules and targets not yet agreed upon. First, previous research point to the fact that it is not recommended to build a global emission trading scheme on a voluntary basis. Second, it is hard for the international community to agree upon common rules. There is a possible risk that the EU will have to lower its own environmental ambitions, as well as losing its ability to decide on its own desired price for allowances. Moreover, based on the set EU environmental targets it appears puzzling that the European Commission expresses its support for CORSIA, even if it is not considered the most effective alternative from an environmental perspective. The fact that the Commission is aware of CORSIA's weaknesses but still advocates a transition makes the issue even more puzzling.

To provide an understanding of this puzzle, this study will make use of a neoliberal institutionalist framework. This theoretical framework will be combined with the method of qualitative concept analysis. The empirical data consist of a debate and a hearing on CORSIA in the European Parliament attended by the responsible Commissioners, as well as of several written documents, including legislative acts and communications put forward by the Commission.

Differences in voluntary and mandatory arrangements and how actors relate to these constitute a fundamental problem in international politics. To provide an understanding of this fundamental

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<sup>1</sup> European Commission, *Phases 1 and 2 (2005-2012)*.

issue, that is, why different international arrangements clashes and why actors are drawn between mandatory and voluntary agreements, neoliberal institutionalism is considered as a suitable theoretical starting point. Neoliberal institutionalism starts from the assumption that international cooperation generates mutual benefits for states. Following the neoliberal institutionalist line of thought, it could be argued that international institutions opens up an arena for economic and political exchanges within the international system.<sup>2</sup> The theory is, as this study will show, however, not without weaknesses. Identified theoretical gaps are the theory's narrow focus on states and neglect of the temporal aspect of actors interests.

The overall purpose of this study is to provide a better understanding of the interests behind the formation of international environmental institutions. The specific aim of this study is twofold. First, this study aims at explaining why the Commission is supporting CORSIA, despite the risk that this would undermine the EU's common environmental targets. Building on the theoretical gaps identified above, the study will also seek to contribute to the further development of neoliberal institutionalism.

The discussion on a global scheme for emission reduction is not new, as the EU for a long time has desired to expand its own regional scheme and several studies has been conducted within the field of emission trading. However, since the discussion became more relevant after the increased focus on the development of CORSIA in 2016, almost no studies have yet been made on the relationship between EU ETS and CORSIA. Particularly not on the Commission's motives for a transition to the global scheme. This further justifies the purpose of this study.

The specific research question that this study will answer is *how can neoliberal institutionalism explain why the European Commission, despite the identified risks, is in favour of a transition from the EU ETS towards CORSIA?*

To answer this question, this study will start by giving a brief background of the two emission reduction instruments of relevance for this study and the problems that has emerged. These problems are then discussed in relation to previous research. The following section account for the development of the theoretical framework of neoliberal institutionalism. The relation between

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<sup>2</sup> Keohane, Robert. O & Nye, Joseph. (2001) Power and interdependence. Longman, p. 18

theory and the method of qualitative concept analysis will be further explained in the method section. The theoretical framework of neoliberal institutionalism will be applied to the case of EU ETS and CORSIA in order to answer the research question. Findings from this analysis will then be reapplied on the framework of neoliberal institutionalism, in order to possibly contribute to the development of the theory. All results will be discussed in the final chapter.

## Two schemes for emission reduction: the EU ETS and CORSIA

Before entering into the theoretical and analytical discussion, it is important to provide an understanding of the two emission reduction instruments that are at the centre of this study, that is, the EU ETS and CORSIA. The purpose of this chapter is to clarify the differences between the two schemes, in order contribute to a better appreciation of the research puzzle.

With regards to the EU ETS, this is a so-called *cap-and-trade* based scheme, meaning that an emission *cap* limits the amount of GHGs that European companies can emit. European companies that want to emit more than this cap must either buy allowances from companies that emit below the cap or reduce their production.<sup>3</sup> This makes it more expensive for companies to release GHGs, which is consistent with the idea that "the costs of pollution should be borne by the entity which profits from the process that causes pollution".<sup>4</sup> In line with its ambition to expand the EU ETS, the EU has established links between the EU ETS and a number of non-EU emission trading schemes (ETSs). The linking agreement between the EU and Switzerland is one example. The EU is also negotiating an agreement between the EU and Australia.<sup>5</sup>

The aviation sector was integrated into the EU ETS in 2012. As a result, operating airlines in Europe must now pay for their emissions.<sup>6</sup> The EU ETS was intended to cover all flights starting from or arriving in the European Economic Area (EEA)<sup>7</sup>. However, this proposal received major complaints from outside the EU, which led to the so-called "Stop the Clock" decision<sup>8</sup>, which limits the scope of the EU ETS to flights operating within the EEA and postpones the inclusion of intercontinental flights.<sup>9</sup>

In contrast with the cap-and-trade based regional scope of the EU ETS, CORSIA is set to become a global market based mechanism designed as an *offset-scheme*.<sup>10</sup> The idea of the scheme is that participating states can compensate for their own emissions by investing in GHG reducing measures

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<sup>3</sup> European Commission, Emission Trading System (EU ETS).

<sup>4</sup> Ambec, Stefan and Ehlers, Lars. (2010) Regulation via the Polluter-Pays Principle, Montreal., p. 2

<sup>5</sup> European Commission, *International carbon market*.

<sup>6</sup> European Commission, *Phases 1 and 2 (2005-2012)*.

<sup>7</sup> EU 28 plus Iceland, Liechtenstein and Norway.

<sup>8</sup> Scheelhaase, Janina., Maertens, Sven., Grimme, Wolfgang., & Jung, Martin (2017) "EU ETS versus CORSIA – A critical assessment of two approaches to limit air transport's CO2 emissions by market-based measures", *Journal of Air Transport Management* 67: 55-62., p. 56-59

<sup>9</sup> European Parliament (2017) *Aviation emissions: MEPs reach deal with Council*.

<sup>10</sup> Scheelhaase et al. (2017), p. 57-28



in other countries and regions.<sup>11</sup> In the case of CORSIA, credits are tradable and serves to create compliance between participating states. The scheme is supposed to work for carbon neutral growth from the year of 2020. This is going to be performed by the aviation sector, purchasing credits or making investments in carbon reduction projects in other sectors and regions around the world.<sup>12</sup> The first voluntary pilot phase of the scheme is supposed enter into force 2021.<sup>13</sup> The second phase that will begin after 2026 will be mandatory for all "ICAO Contracting States".<sup>14</sup>

### *The scope of the EU ETS and CORSIA*

In 2016, the EU ratified the Paris Agreement on Climate Change. Following the ratification, the Commission introduced the so called National Determined Contribution (NDC), also known as the *40 percent targets*, with the purpose of making sectors within the EU ETS reach a 40 percent emission reduction in 2030 (compared to 2005 levels).<sup>15</sup> As the aviation sector is an important part in reaching this target, the EU ETS covers all emissions from aviation within the EEA, including domestic flights. The EU ETS includes all EU states as well as Iceland, Liechtenstein and Norway. The first phase of CORSIA covers 71 states, participating on a voluntary basis. CORSIA, which is supposed to be the international scheme, only covers flights between participating states and the scheme also differ from the EU ETS since participants within the scheme only have to report and compensate for post-2020 emissions. It is possible to see clear differences, both environmental and competitive, between the two schemes.<sup>16</sup> The Commission has sought support from the member states to participate in CORSIA's first phase, despite the fact that the targets and objectives of CORSIA are still not yet agreed upon. Moreover, even though CORSIA covers states on an international basis, all ICAO participants are not obliged to participate in the mandatory phase of CORSIA. As explained by Scheelhaase et al. ICAO "excludes states whose carriers have a combined share of international aviation activities in RTKs [Revenue Tonne-kilometres] in the year 2018 not exceeding 0.5% of total (global) RTKs. In some cases, this leads to strange effects since routes to, from or between countries with high air traffic volumes but a lack of (in a worldwide context) significant home carriers may be excluded from the scheme."<sup>17</sup> This means that, according to today's regulation, emissions released on these routes are left out from CORSIA. In addition,

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<sup>11</sup> European Commission (2005), *The Kyoto Protocol.*, p. 4-5

<sup>12</sup> Scheelhaase et al. (2017), p. 57-28

<sup>13</sup> Carbon Market Watch (2018) *EU Member States resist industry pressures to protect climate regulation.*

<sup>14</sup> Scheelhaase et al. (2017), p. 57-28

<sup>15</sup> Scheelhaase et al. (2017), p. 59-60

<sup>16</sup> Scheelhaase et al. (2017), p. 56-58

<sup>17</sup> Scheelhaase et al. (2017), p. 57-59

CORSIA does not include domestic flights. The entering into force of the global scheme would thus leave all air traffic within the participating states without sufficient rules. The Commission's decision to support CORSIA would possibly result in a change of the aviation sector within the EU ETS, which may have an impact on the EU commitments to the Paris agreement.<sup>18</sup>

### *The progress of CORSIA*

ICAO-member states have been expected to implement CORSIA's Standards and Recommended Practices (SARPs) for *monitoring, reporting and verification* (MRV) from early 2019. Based on an ICAO State Letter sent on 20 July 2018, the organisation gave its member states a time limit to file any disapproval with the SARPs. This limit was set to October 22, 2018. In addition, member states had until 1 of December 2018 to file differences with the SARPs and their national regulation.<sup>19</sup> Following the ICAO request, the Commission instructed the member states to file the existing differences between the EU ETS Directive 2003/87/EC and the CORSIA. The scope of the EU ETS directive will continue for the time being, while the Commission continues to work on regulations in accordance with CORSIA and from the 1 of January 2021 the CORSIA offsetting requirements are supposed to apply for the member states. CORSIA's MRV-standards were however approved and implemented in the EU from January 2019.<sup>20</sup> A CORSIA regulation for emission reduction has not yet been established. The quota of emissions international airlines need to offset will be decided based on emissions reported by the aviation sector under the period 2019-2020.<sup>21</sup>

As set out in the above discussion, many differences exist between the two schemes, particularly fundamental differences in the two schemes' environmental targets, making the objectives of CORSIA to be significantly weaker than the EU ETS.<sup>22</sup> Even though the EU and its member states have formulated strict targets in accordance with the Paris agreement, the Commission has decided to support and started to prepare for the transition to the not yet finalised and potentially environmentally weaker CORSIA. The Commission still, however, underscores the importance of a

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<sup>18</sup> Scheelhaase et al. (2017), p. 59

<sup>19</sup> VedderPrice (2018). *ICAO CORSIA Update: Compliance Complexities Under ICAO's New Carbon Offsetting Scheme*.

<sup>20</sup> Council of the European Union (2018) Council decision 2018/0372 on the position to be taken on behalf of the European Union within the International Civil Aviation Organization in respect of the First Edition of the International Standards and Recommended Practices on Environmental Protection – Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), p. 1-3

<sup>21</sup> Commission Delegated Regulation (EU) .../... of 6.3.2019 supplementing Directive 2003/87/EC of the European Parliament and of the Council as regards measures adopted by the International Civil Aviation Organisation for the monitoring, reporting and verification of aviation emissions for the purpose of implementing a global market-based measure., p. 3

<sup>22</sup> ENVI committee meeting in the European Parliament 19-11-2018. Item number two on the agenda: Exchange of views with Ms Violeta Bulc, Commissioner for Transport, on ICAO's CORSIA developments., Transcript p. 3-5

united support for the global scheme. CORSIA is a voluntary scheme and the EU ETS is mandatory, which can be considered as a problem. This will be developed further in the next section.

## Previous research on emission trading

This section will discuss previous research within the field of emission trading. This serves to situate the study within the broader context of environmental agreements and emission reduction literature and thereby create a better understanding of the problem within the field of emission reduction instruments.

A significant number of studies on ETSs focus on the possible linking of different ETSs, which could potentially lead to the formation of a global scheme, as seen above something which the EU also has shown interest in. In their study on emission trading, Perdan and Azapagic explain how differences between ETSs, as well as their host countries may hinder an effective combination of ETSs and the creation of a global scheme. They particularly focus on the host countries different political and economic set-up, which affect the design of the schemes.<sup>23</sup> At the same time, they maintain that the development of a global ETS would bring benefits to the participating states and result in a leveled playing field for companies covered by emissions trading as well as reduce their abatement costs.<sup>24</sup> The reduced scope of the EU ETS is limited to European countries within the EEA and the global scheme of CORSIA has no finalised number of participating states. In line with the authors thoughts on ETSs, and with regards to the case of EU ETS and CORSIA, it might be reasonable to argue that even though there are a number of differences between these countries, the European countries still have a common cultural and long established administrative foundation. Participating countries of the global scheme of CORSIA differ to a greater extent and the scheme has a weaker administrative capacity with targets not yet agreed upon.

Metcalf and Weisbach, for their part, discusses the impact of emission allowance prices on the effectiveness of ETS linkages. They hold that for linkage to be effective, it is important that the linked scheme use the same emission allowance price. Different allowance prices across the linked schemes are likely to result in efficiency losses, also known as carbon leakages, meaning that carbon-intensive industry leaves its country of origin to seek the lowest prices. Linking various schemes with different rules and standards together will therefore generally reduce the price on emission permits.<sup>25</sup> Implicitly, Metcalf and Weisbachs research seems to suggest that companies are

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<sup>23</sup> Perdan, Slobodan. and Azapagic, Adisa (2011) "Carbon trading: Current schemes and future developments", *Energy Policy* 39: 6040–6054., p. 6047-6050

<sup>24</sup> Perdan, Slobodan. and Azapagic, Adisa (2011). p. 6047-6048

<sup>25</sup> Gilbert E. Metcalf and David Weisbach (2011) "Linking Policies When Tastes Differ: Global Climate Policy in a Heterogeneous World" *Review of Environmental Economics and Policy*, Volume 6, Issue 1, 1 January 2012, Pages 110–129., p. 110, 112-113

rational actors, making their choices based on what is most in line with their self-interests, an issue that will be further developed in the theoretical discussion. In the case of EU ETS and CORSIA, the absence of sufficient rules would possibly encourage airlines within the EU ETS to buy allowances or to use offset credits from where the prices would be lowest, in this case from CORSIA.

In line with Metcalf and Weisbach, Stranlund maintains that the level of compliance among states changes in relation to the price on allowances. He argues that linking different schemes together can both increase and decrease actors compliance. The linkage between two countries emission trading schemes using different prices on allowances would not only equalise the price in the long run, it is also likely that the level of compliance will increase in the country where the price is lower and vice versa. The importance of taking enforcement strategies into consideration when linking emission schemes is therefore underlined as important since synced enforcement strategies between the linked schemes would adjust potential compliance issues. Anyhow, due to compliance issues, Stranlund suggests that the development of regional and national linked global emission schemes seems more likely than a unitary global scheme,<sup>26</sup> an argument of direct relevance to the development of the EU ETS and CORSIA. Also Stranlund's research seems to start from the assumption that states and other actors follow a rational logic and look to the most cost-effective alternative. Compliance problems may be an issue without a common price on the schemes emission allowances. Based on this, it might be reasonable to believe that enforcement is an important part of participating actors compliance during a linkage of ETSS. The prices on permits might also decrease, if sufficient rules are not decided on. Since the international community has a hard time deciding on common rules, there is a risk that the price on permits might fall under the EU-preferred level if a transfer from the EU ETS to CORSIA would be a reality.

Also Aakre and Hovi focus on compliance in their study on mandatory and voluntary ETSS. With regard to voluntary schemes, the authors point to two factors that motivates actors to participate in ETSS even if they are not forced to, which is the case in mandatory schemes. The first factor is self-interest, for instance economic or environmental interests. The second factor is a willingness to do good, that is, what is in the interest of the public as established by norms.<sup>27</sup> They further suggest

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<sup>26</sup> Stranlund John. K (2017) "The Economics of Enforcing Emissions Markets" *Review of Environmental Economics and Policy*, Volume 11, Issue 2, 1 July 2017, Pages 227–246., p. 241-242

<sup>27</sup> Aakre, Stine. and Hovi, Jon (2010) "Emission trading: Participation enforcement determines the need for compliance enforcement", *European Union Politics* 11(3): 427–445., p. 430

that mandatory schemes generally have lower compliance than voluntary schemes.<sup>28</sup> Despite the lack of correlation in their findings between enforcement and compliance, the authors do not advocate for the formation of a global emission trading scheme without a sufficient level of enforcement. The reason for this is that they suggest that compliance enforcement is an important factor when it comes to building trust in the market for permits among participants. Enforcement is also seen as an instrument to ensure participation, as well as a useful tool for making self-interested states motivated to cooperate.<sup>29</sup> As such, this research could arguable not be used to explain the Commission's decision to support a transition from the EU ETS, a mandatory scheme, towards CORSIA, a voluntary scheme. Instead Aakre and Hovi's conclusion, advocating for compliance enforcement within global ETSs, makes a stronger case for this specific study. However, their findings might be useful in explaining how different factors motivate actors to form or participate in ETSs.

A number of scholars have also studied problems that may arise when different ETSs are running in parallel, linking them together without sufficient rules. Double counting is one such problem, which means that "a single greenhouse gas emission reduction or removal is used more than once to demonstrate compliance with mitigation targets."<sup>30</sup> To prevent this problem, there is a need for solid emission MRV-rules and two or more schemes linked together would need to be coordinated and rely on the same MRV-standards.<sup>31</sup> In relation to this, Stranlund underscores the difficulties in obtaining emission data from ETSs participants. There is essential that this data is accurate for the emission trading scheme to work. The EU has good experience of emission monitoring within the EU ETS. However, many other schemes rely on firms self estimation of emissions, hence the imminent risk of imperfect monitoring and reporting in many ETSs.<sup>32</sup> It is necessary to highlight that "monitoring activities are not simply limited to the performance of an offset project. Typically, offset projects must be additional, meaning that the emissions reduction would not have occurred without the project."<sup>33</sup> There is therefore an extensive demand for gathering of data. Some of the developing countries who holds a large supply of credits, do not possess the possibility or enforcement capacity to monitor the system of offset credits, which can lead to trading of credits

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<sup>28</sup> Aakre, Stine. and Hovi, Jon (2010), p. 431-432, 440-442

<sup>29</sup> Aakre, Stine. and Hovi, Jon (2010), p. 441.

<sup>30</sup> Climate Focus (2015) Double Counting in the Paris Agreement, Briefing Note.

<sup>31</sup> Perdan, Slobodan. and Azapagic, Adisa (2011), p. 6048-6049

<sup>32</sup> Stranlund John. K (2017), p. 240

<sup>33</sup> Stranlund John. K (2017), p. 242

that is not valid to be counted as emission reduction.<sup>34</sup> As already mentioned above, the EU has accepted to implement ICAOs MRV-standards from early 2019. But, since there is still no finalised rules or treaty for the CORSIA scheme there is still a fear that, if the two schemes would be brought together in order to work in parallel, there would be a possible risk of double-counting.<sup>35</sup> However, it is not always easy to ensure that the use of offsets in other countries actually contributes to emission reduction. This process demands high administrative capacity and monitoring standards.<sup>36</sup> The EU ETS is backed by the EU, its machinery and administration. At the same time, CORSIA is not an international organisation. In accordance with Stranlunds way of arguing there may be differences in countries' ways of managing their monitoring and verification. Without sufficient rules the combination of different schemes will increase the risk of errors in emission monitoring as well as the possibilities for companies to cheat with the monitoring and reporting. There might be a problem that the EU is used to emission monitoring in a way that other countries are not.

The study of Scheelhaase et al. specifically focuses on the implementation of CORSIA and its potential effects on the EU ETS. The authors outline a few options for how the EU could eventually proceed when the pilot phase of CORSIA begin. Option *one* would be to continue with the reduced scope of the EU ETS until the first phase of CORSIA enter into force. The aviation sector within the EU ETS will then be phased out and cease to exist. The *second* option would be to introduce the full scope of the aviation sector within the EU ETS. When CORSIA enter into force, the EU would need to leave the cooperation due to the risk of double counting in using parallel schemes. Within the *third* option, the reduced scope would continue after the entering into force of CORSIA, covering flights within EEA. CORSIA rules would apply on international flights. In the *fourth* option, the EU dismantle the aviation sector from the EU ETS, which is completely replaced by CORSIA. Domestic flights within the EEA are voluntarily included in CORSIA. The last and *fifth* option according to the authors, would be for the EU to exclude the aviation sector from the EU ETS and agree to implement CORSIA's rules on international flights. Domestic flights would still be unregulated, but all other flights would be covered by CORSIA. The authors come to the conclusion that the second option would be the most beneficial from an environmental perspective. However, they underline that the first option is where the EU seems to aim right now, according to the Commission's latest proposal (Regulation (EU) 2017/2392). The third option would anyhow bring a

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<sup>34</sup> Stranlund John. K (2017)., p. 242-243

<sup>35</sup> Transport & Environment *Aviation in the ETS*.

<sup>36</sup> Stranlund John. K (2017)., p. 242

larger environmental benefit than the first option, since two schemes together would share the responsibility of domestic, EEA- and international flights. It is also possible to argue that the third option would reach a higher acceptance by external actors than the second option. The third option would however need extensively developed rules and regulations, especially regarding standards on monitoring, reporting and verification.<sup>37</sup> Even though it is not the most effective option from an environmental point of view the Commission is expressing its support for CORSIA (Scheelhaase et al. first option). This indicates that the Commission sees greater benefits with a global cooperation than a regional one, even if a full scope EU ETS, according to research, would result in larger environmental benefits. From this backdrop, Scheelhaase et al. therefore suggest that the best option from an combined environmental and competitive perspective would be to continue with the reduced scope of the EU ETS (flights within the EEA) and to use CORSIA in order to cover international flights. A parallel use of the schemes would in that way cover the most possible of the aviation sector.<sup>38</sup> Even though the competitive impacts of the two approaches, full or reduced scope, of the EU ETS are calculated to be small, given that the prices on allowances today are low, Scheelhaase et al. point out that a parallel use still comes with the risk of rerouting air traffic to airports outside of Europe. Seen from an environmental perspective only, the authors reach the conclusion that a full scope use of the EU ETS would be the most beneficial.<sup>39</sup>

From this discussion it appears puzzling that even though the first option is not the most beneficial from an environmental perspective, and that it might be hard for the EU to reach its commitments to the Paris agreement with a transfer to the offsetting scheme of CORSIA, the Commission still strive for a global scheme where the aviation sector within the EU ETS would risk to be dismantled. This is also demonstrated in option four and five. What could explain the Commission's support is the strive of possible long-term benefits that may come from such cooperation. In the long run, when CORSIA covers all ICAO-states, it might have a greater environmental impact than it is predicted to have short/mid-term.

From previous research it is possible to see different reasons for states to enter into international institutions. Price is an important factor, affecting actors choices and compliance, which points to the rational nature of actors in ETSs. Different interests, and temporal perspectives, influence the

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<sup>37</sup> Scheelhaase et al. (2017), p. 60

<sup>38</sup> Scheelhaase et al. (2017), p. 55-57

<sup>39</sup> Scheelhaase et al. (2017), p. 59



willingness of forming international institutions. Research also underlines the importance of enforcement within global schemes, something CORSIA does not make use of during the voluntary phase. The combination of different schemes has also proven to be complicated and the lack of sufficient rules and targets makes linking ineffective. One motive for the Commission to promote the agreement might be the fact that they potentially operate with different temporal perspectives than for example companies or other non-state actors. The fact that different kinds of actors, acting under their rationality, choose with different temporal perspectives is not taken into account in the theory, means that the case of international emission reduction agreements offers the possibility of theory development.

## Theory

To provide an understanding of why the Commission has chosen to support the development of a global emission reduction scheme, this study makes use of a neoliberal institutionalist framework. The theoretical framework mainly builds on the neoliberal institutional works of Keohane and Nye, as they can be considered as the founding fathers of neoliberal institutionalism. In the first section, this chapter will briefly introduce neoliberal institutionalist theory. Based on this introduction, the remaining sections will develop the three analytical dimensions that will constitute this study's analytical framework and also suggest where the study might contribute to developing the theory.

### *Introduction to neoliberal institutionalism*

Neoliberal institutionalist theory, as developed by Keohane and Nye, builds on the assumption that states are rational and self-interested actors in an anarchic system.<sup>40</sup> In this system, power is important, but does not derive solely from military force.<sup>41</sup> Instead, economic power, including trade, is emphasised, giving rise to interdependent relationships.<sup>42</sup> This basic assumption contributes to the understanding of why states come together to create institutions.

In a neoliberal institutionalist world, states see cooperations, which brings improved information exchange, as a way to gain mutual benefits.<sup>43</sup> Instead of seeking relative gains, what they care about are absolute gains.<sup>44</sup> Hence, they are willing to give up part of their sovereignty to engage in international cooperations.<sup>45</sup> The belief in cooperation makes states more inclined to form institutions, resulting in common rules and norms, which affect how they behave internationally. This means that institutions both create opportunities for states and restrict their actions. In the absence of institutions, actors in the international system would lack an arena to share understandings and expectations.<sup>46</sup> This assumption is the corner stone of neoliberal institutionalist theory.

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<sup>40</sup> Danish, Kyle. (2008) *International Relations Theory*. Oxford Handbooks Online., p. 5-7

<sup>41</sup> Keohane, Robert. O & Nye, Joseph. (1987) "Power and Interdependence Revisited" *International Organization*, Vol. 41, No. 4, 725-753., p. 733

<sup>42</sup> Keohane, Robert. O & Nye, Joseph. (1987)., p. 747

<sup>43</sup> Danish, Kyle. (2008)., p. 5-7

and

Keohane, Robert. O & Nye, Joseph. (1987)., p. 747

<sup>44</sup> Keohane, Robert. O. (1990) "Multilateralism - an agenda for research". *Internal journal* Vol. XLV, Iss. 4, 731-764, p. 734

<sup>45</sup> Danish, Kyle. (2008)., p. 5-7

<sup>46</sup> Keohane, Robert. O & Nye, Joseph. (1987)., p. 747

and

Keohane, Robert. O. (1990)., p. 734

Keohane defines international institutions as "persistent and connected sets of rules (formal or informal) that prescribe behavioral roles, constrain activity, and shape expectations."<sup>47</sup> International organisations, that is, formal intergovernmental entities with "legal standing, physical headquarters, executive head [and] staff"<sup>48</sup>, is one form of international institution. However, also states and softer arrangements like sovereignty or neutrality are considered international institutions.<sup>49</sup> Institutions can not be examined without mentioning *regimes*, which according to Krasner can be defined as "sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations."<sup>50</sup> Keohane and Nye, for their part, define regimes as governing arrangements whereby states, in "creating or accepting procedures, rules, or institutions for certain kinds of activity, [...] regulate and control transnational and interstate relations."<sup>51</sup> As provided by these definitions, the concepts of institutions and regimes are close to identical. However, while regimes can be considered norms and rules for action, institutions can be understood as strongly linked norms and rules of action upheld by named agents.<sup>52</sup> This study however does not make any distinction between the two concepts since they both entail the cooperative aspect of importance for this research. International institutions will therefore be used to denominate the comprehensive set off different norms and rules of action governing the behavior of international agents.

Pollack's study on the EU is a concrete example of how neoliberal institutionalism can be applied to provide an understanding of why states enter international institutions. Starting from neoliberal institutionalist assumptions, Pollack explains how EU member states delegate power to the European institutions in order to reduce transaction costs of implementing common policies, and in doing so give up part of their sovereignty. The author also emphasises how the EU helps fill information gaps, provides expertise, ensures that commitments agreed upon are credible, monitors compliance, and sets the agenda.<sup>53</sup> As such, Pollack's argument is consistent with the neoliberal institutionalist assumption that states are rational actors that enter institutions to gain mutual benefits. In the same neoliberal institutionalist spirit, Mitchell, moreover, highlights how

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<sup>47</sup> Keohane, Robert. O. (1988) "International Institutions: Two Approaches" *International Studies Quarterly*, Vol. 32, No. 4, pp. 379-396., p. 383

<sup>48</sup> Thomas G. Weiss & Rorden Wilkinson (2013) *International Organization and Global Governance*, Taylor and Francis, p. 7

<sup>49</sup> Keohane, Robert. O. (1988), p. 383

<sup>50</sup> Krasner, Stephen. D. (1982) "Structural Causes and Regime Consequences: Regimes as Intervening Variables," *International Organization* 36, no. 2., p. 186

<sup>51</sup> Keohane, Robert. O & Nye, Joseph. (2001), p. 5

<sup>52</sup> Thomas G. Weiss & Rorden Wilkinson (2013), p. 7-8

<sup>53</sup> Pollack, Mark. (2003) *The Engines of European Integration: Delegation, Agency, and Agenda Setting in the EU*. Oxford., p. 6

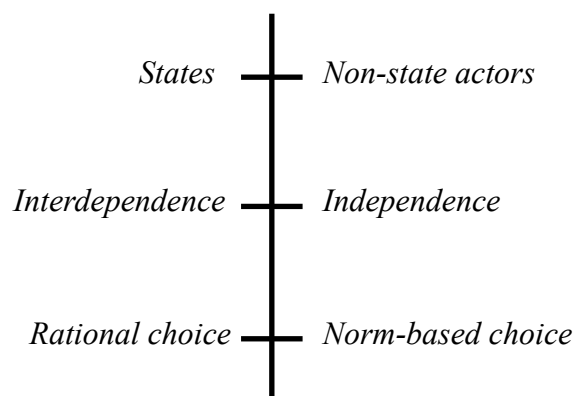
international institutions can bring mutual benefits when it comes to environment, by introducing common environmental measures that influence global environmental behaviour.<sup>54</sup> In spite of many scholars successful use of neoliberal institutionalism, it should be noted that many have also pointed to certain gaps in the theory. To give but one example, Pevehouse discards neoliberal institutionalism in his studies on international organisations, arguing that it tends to ignore domestic politics.<sup>55</sup> Here it would also be reasonable to underscore the one-sided focus on states in international institutions and the negligence of other types of actors. Studying how different kinds of actors interact to construct international institutions – like CORSIA – may contribute to developing the theory.

As the EU ETS and CORSIA can be considered institutions from the above discussed definition, neoliberal institutionalism makes a suitable framework. Due to the cross-border nature of environmental challenges international institutions are more effective in addressing these than are individual states. This justifies the choice of theory.<sup>56</sup> The following sections will develop and discuss the key dimensions that make up this study’s analytical framework.

### *Analytical framework*

Based on the above introduction to neoliberal institutionalism, three dimensions, each consisting of two parameters, will be used: (1) *agency* (states – non-state actors), (2) *dependence* (interdependence – independence), and (3) *logic of choice* (rational choice – norm based choice).

Figure 1: Analytical framework



<sup>54</sup> Mitchell, Ronald. B (2003) How institutions change: perspectives on social learning in global and local environmental contexts., p. 35-36, 46-47.

<sup>55</sup> Pevehouse, Jon. C. (2002) Democracy from the Outside-In? International Organizations and Democratization, *International Organization* 56, 3, pp. 515-549., p. 518

<sup>56</sup> Saryal, Rajnish (2015) "Global Environmental Agenda: The Neoliberal Institutional Perspective" *Jadavpur Journal of International Relations* 19(1) 1–21., p. 1-2, 6

These dimensions will serve as a filter in the search for keywords in the empirical material, that indicate a neoliberal institutionalist way of thinking. As will be seen, there is a certain overlap between the three dimensions that is unavoidable due to the interconnected nature of neoliberal institutionalist assumptions. The division is however necessary to allow for a systematic filtering of the chosen material.

#### *Agency: States – Non-state actors*

The first dimension that will be developed is that of *agency* within institutions. Modern neoliberal institutionalist scholars often recognise the importance of non-state actors, like transnational businesses within the international system. However, with regard to agency within international institutions, this is almost exclusively limited to states.<sup>57</sup> Accordingly, Keohane and Nye refute the modernist view of a world order characterised by multinational corporations, international social movements and organisations rather than by territorial states.<sup>58</sup> Following their example, also Mitchell focuses mainly on state agency. However, he also accredit some agency to various non-institutional actors, such as private corporations, civil society, and non-governmental organisations, and explain how they can both be influenced by and influence international institutions.<sup>59</sup> This is further discussed by Saryal, who holds that international organisations, companies, local actors, social groups, individuals and other non-state actors are as important as states.<sup>60</sup> He holds that "[t]he problem of inefficiency of environmental regimes [in this study institutions] arises from the difficulty of regulating independent political actors in the context of an anarchical international system."<sup>61</sup> This indicates that the agency of non-state actors becomes more recognised within the theory of neoliberal institutionalism. Actors like the EU has been a successful non-state participant within many international environmental agreements.<sup>62</sup> The argument that neoliberal institutionalism "contest the state-centric biases of realist explanations"<sup>63</sup> would strengthen the view of international organisations as non-state actors. The concept of agency can therefore go further than states. This is however what makes this dimension problematic. Even though these actors are mentioned as important they are not fully accepted by the theory and the main actors discussed by the scholars continues to be states.

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<sup>57</sup> Keohane, Robert. O. (1990), p. 732

<sup>58</sup> Keohane, Robert. O & Nye, Joseph. (1987), p. 727

<sup>59</sup> Mitchell, Ronald. B (2003), p. 42

<sup>60</sup> Saryal, Rajnish (2015), p. 5

<sup>61</sup> Saryal, Rajnish (2015), p. 17

<sup>62</sup> Saryal, Rajnish (2015), p. 5

<sup>63</sup> Saryal, Rajnish (2015), p. 5

Following the above, the one-sided image of actors within institutions leaves non-states actors without sufficient recognition and the fact that these actors have the ability to influence institutions are only briefly discussed. Scholars mention the need for an inclusion of these actors or the need for more research but then continue discussing the issue from a state perspective. Agency is essential for this specific research since a transfer from EU ETS towards CORSIA would affect a number of different actors. The fact that the EU, based on the definition above, can be seen as both an international institution and an international organisation makes the agency dimension more complicated and more difficult to apply in this specific case, as will be seen in the analysis.

Based on this, the dimension *agency* has been developed, which comprises of two parameters: *states* and *non-state actors*. This dimension will be used to search for key words and sentences that indicate what actors the Commission recognises and their perceived degree of agency within international relations in general and within emission reduction in particular.

#### Dependence: *Interdependence – independence*

To provide an understanding of the concept of interdependence, Keohane and Nye start from *dependence*, which they define as "a state of being determined or significantly affected by external forces."<sup>64</sup> Building upon this definition, interdependence is defined as *mutual* dependence. Within the international system, Keohane and Nye explain, interdependence "refers to situations characterized by reciprocal effects among countries or among actors in different countries."<sup>65</sup> In an interdependent relationship between states, costs and benefits go both ways, which limits state autonomy. In an interdependent world, furthermore, staying independent is more costly than partly giving up state sovereignty.<sup>66</sup> Traditionally interdependence among states has been associated with military power and security seeking. In a neoliberal institutionalist view, however, interdependence has more to do with the economic, social and environmental aspects of state relations.<sup>67</sup> When mentioning military interdependence, neoliberal institutionalist scholars emphasise that this does not necessarily equal a zero-sum game. Instead, military alliances and cooperations are formed to create a secure environment for all participating states.<sup>68</sup>

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<sup>64</sup> Keohane, Robert. O & Nye, Joseph. (2001)., p. 7-9

<sup>65</sup> Keohane, Robert. O & Nye, Joseph. (2001)., p. 7-9

<sup>66</sup> Keohane, Robert. O. (1990)., p. 742

<sup>67</sup> Keohane, Robert. O & Nye, Joseph. (1987)., p. 727

<sup>68</sup> Keohane, Robert. O & Nye, Joseph. (2001)., p. 9

Keohane and Nye also introduces the concept of *complex interdependence*, which they put forward as the ideal type of state relations. They define this as "a situation among a number of countries in which multiple channels of contact connect society [...]; there is no hierarchy of issues; and military force is not used by governments towards one another".<sup>69</sup> What distinguish complex interdependence from interdependence are the many actors and issues involved.

In line with Keohane and Nye, it might be reasonable to suggest that climate issues are characterised by interdependence, or even complex interdependence, as these are issues that affect all states and that no state can solve on its own. As such, it could possibly be argued that cooperation is the best way to minimise costs resulting from climate change. This arguably makes dependency an important concept for this specific study, which will be further demonstrated in the analysis.

By providing an arena for cooperation and information exchange, facilitating agreements and giving rise to state expectations, institutions have an impact on states interdependent relationships.<sup>70</sup> Within the frames of self-interests, states allow international institutions to influence their interests and capabilities. States relate to the rules and norms set by institution to protect their reputation within the international system.<sup>71</sup> State preferences may therefore change based on interdependence since they are more likely to base their decisions on other states actions. If the level of interdependence increases, the need for coordinated policy will be more significant.<sup>72</sup>

The function and the potential environmental benefits of institutions are clearly expressed from a neoliberal institutionalist perspective. The above discussion further shows the possible view of CORSIA as an international emission reduction institution, formed in order to better manage global aviation emissions.

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<sup>69</sup> Keohane, Robert. O & Nye, Joseph. (1987)., p. 731

<sup>70</sup> Keohane, Robert O. (1982) "The Demand for International Regimes" *International Organization*, Vol. 36, No. 2, International Regimes, pp. 325-355., p. 334

And

Keohane, Robert. O & Nye, Joseph. (1987)., p. 728, 732

<sup>71</sup> Keohane, Robert. O. (1990)., p. 737

And

Keohane, Robert. O & Nye, Joseph. (1987)., p. 743

<sup>72</sup> Keohane, Robert. O. (1990)., p. 742

This gives rise to the dimension of *dependence*, with its parameters of *interdependence* and *independence*. The dimension will be used to get an understanding of how the Commission considers state relation and global cooperation.

Logic of choice: *Rational choice – norm based choice*

The neoliberal institutionalist assumption according to which states are rational self-interested actors can be used to explain states' motivation behind states participation in international institutions.<sup>73</sup> Keohane holds that "state behaviour can only be understood in the context of international institutions, which both constrain states and make their actions intelligible to others, and it denies that states consistently search for relative gains."<sup>74</sup> Instead, states strive for absolute gains and regard cooperation as a non-zero sum game, which results in a positive outcome for all actors involved.<sup>75</sup> It should be noted that states, being rational actors, would not engage in cooperations without there being any possible gains and benefits.<sup>76</sup> This applies as much to states with economic interests as to states with environmental interests.<sup>77</sup>

As already mentioned, entering international institutions means giving up part of state sovereignty. It could be questioned why states are willing to make this commitment despite there being no guarantee that it will actually bring the desired benefits. Keohane explain this by referring to the so called *norm for generalized commitment*, which provides that if one state helps other states, it can count on help in the future.<sup>78</sup>

To further explain the motives behind states' participation in international institutions, Mitchell makes a distinction between two logics of action. Under the *logic of consequences*, Mitchell suggests, states act based on calculations of what actions will bring the most (material) benefits.<sup>79</sup> This is a "self-conscious process".<sup>80</sup> By rewarding or sanctioning certain actions, moreover, institutions can influence state behavior.<sup>81</sup> This logic, which is consistent with neoliberal institutionalist thinking, stands in contradiction to the *logic of appropriateness*. Under the logic of

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<sup>73</sup> Keohane, Robert. O. (1988), p. 381

<sup>74</sup> Keohane, Robert. O. (1990), p. 734

<sup>75</sup> Saryal, Rajnish (2015), p. 3-4

<sup>76</sup> Keohane, Robert. O. (1988), p. 386

<sup>77</sup> Saryal, Rajnish (2015), p. 4

<sup>78</sup> Keohane, Robert O. (1982), p. 342-343

<sup>79</sup> Mitchell, Ronald. B (2003), p. 44-45

<sup>80</sup> Mitchell, Ronald. B (2003), p. 35

<sup>81</sup> Mitchell, Ronald. B (2003), p. 44-45



appropriateness, state behavior is not a function of interests, but of state identity. Mitchell holds that, in line with this logic, "norms, identities and ideas play far more important roles than interests and power".<sup>82</sup> This implies that states join international institutions because they identify themselves with the norms and rules that constitute the institutions.<sup>83</sup> This logic is consistent with a norm-based approach to state relations. Institutions influence states by providing an arena for cooperation consistent with the states identity or practice influence over states that join the institution for other reasons. As such, both logics can be used to explain how institutions can influence state behavior.<sup>84</sup>

Building on the logic of consequences and the neoliberal institutionalist line of thought, Keohane suggests that, within international institutions, states' "[s]hort-run self-interest is affected by constraints imposed on policy choices by agreed-upon rules; long-run conceptions of self-interest may be reshaped as a result, in part, of practices engaged in over a period of time."<sup>85</sup> In other words, by putting constraints on states' short-term interests, institutions influence states long-term interests. Even though Keohane build his argument on the neoliberal institutionalist line of thought, it might be reasonable to suggest that it also borrows from the logic of appropriateness. In making this argument, moreover, Keohane makes a distinction between short-term and long-term interests, but fails to further develop this distinction. There is reason to believe, however, that when states with interests of different temporal scope join the same institution, possible interest clashes may occur. With regard to this specific study, it may be reasonable to suggest that economic interests are often short-term, whereas environmental interests are more long-term.

The above discussion of the possible logics behind state behavior can be linked to Aakre and Hovis study on why states participate in ETSS. Interest driven states, that is, states following the neoliberal institutionalist logic of consequences, are less inclined than norm driven states to enter international environmental institutions. Based on this reasoning, it might be reasonable to suggest that states working under the logic of consequences would be in favor of a transfer from the EU ETS to CORSIA if they believe that this would bring additional benefits. Under the logic of appropriateness, on the other hand, states would presumably support the transition towards CORSIA as this is consistent with their identity of environmentally friendly states.

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<sup>82</sup> Mitchell, Ronald. B (2003)., p. 35

<sup>83</sup> Mitchell, Ronald. B (2003)., p. 45

<sup>84</sup> Saryal, Rajnish (2015)., p. 8

<sup>85</sup> Keohane, Robert. O. (1990)., p. 737

Building on this discussion, the dimension of *logic of choice* has been developed, which is made up of the parameters *rational choice* and *norm-based choice*. This dimension will be used to provide an understanding of the logic behind the Commission's support for CORSIA. The following section will provide an explanation of how, more specifically, the three dimensions will be applied to the gathered material.

## Research design and method

To provide an explanation of why the Commission has chosen to support a transition from the EU ETS to CORSIA, this study will make use of the method of *qualitative concept analysis*. Considering its deductive nature, this method is suitable as it allows the theory, in this case neoliberal institutionalism, to determine the concepts, or dimensions, that are to guide the screening of the gathered material. A more inductive approach would be less effective, as it implies a more open and broader analysis of the data, where the texts determine what is being studied. In other words, rather than starting from observations of the studied material, this study has a theoretical starting point. By in this way applying neoliberal institutionalist theory on the gathered material, previous understandings of state behavior and institution formation will, in a first step, serve to explain and interpret the Commission's actions. Following the examples of several scholars, the findings of this study will, in a second step, be used to reflect on the theory itself.<sup>86</sup> In this way, qualitative concept analysis allows this study to contribute to developing the theory itself, in line with the second aim of this study.

More specifically, the method of qualitative concept analysis is, for the purpose of this study, operationalised in several steps. First, the basic assumptions of the theoretical framework, that is, neoliberal institutionalism, are identified. From these basic assumptions, a number of systematised concepts are defined, which constitute the three dimensions that make up this study's analytical instrument: : *agency, dependence* and *logic of choice*. In a next step, each dimension is divided into two parameters: *states* and *non-state actors*, *interdependence* and *independence*, and *rational choice* and *norm-based choice*. These parameters are used as a filter for the systematic screening of the empirical data. In other words, these parameters are used to collect keywords and sentences that fall within their scope and indicates the Commission's motives. Lastly, in line with the second aim of this research, the findings will be put in relation to the basic assumptions of the theoretical framework, in an attempt to contribute to the development of this theory.<sup>87</sup>

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<sup>86</sup> Alvesson, Mats and Kärreman, Dan. (2013) *The Use of Empirical Material for Theory Development In: Qualitative Research and Theory Development: Mystery as Method*. London., p. 8-9, 31-33

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Hyde, Kenneth. F. (2000) "Recognising deductive processes in qualitative research", *Qualitative Market Research: An International Journal*, Vol. 3 Issue: 2, pp.82-90., p. 83

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Keohane, Robert O. (1982)., p. 328-329

<sup>87</sup> Adcock, Robert, & Collier, David. (2001) Measurement Validity: A Shared Standard for Qualitative and Quantitative Research. *American Political Science Review* 95(3)., p. 530-531

And

Bergström, Göran & Boréus, Kristina. (2012) *Textens mening och makt.*, p. 156-157

To further clarify how the dimensions developed for this study will be applied, a few examples can be provided. With regard to agency, this dimension will serve to detect keywords and sentences indicating how the Commission discusses and recognises actors within the context of the EU ETS and CORSIA. Examples of keywords are in this case *states, governments, firms, companies, airlines, NGOs* and other *non-state actors*. As for dependence, sentences indicating the Commission's view of the issues at stake and its understanding of at what level of the international system these issues are better addressed. Possible keywords are *global problem/solution, global environmental action, cross-border, cooperation, collaboration, individual/national/regional action* and *self-determination*. The third and last dimension – the logic of choice – is used to identify text segments indicating the logics behind the Commission's support for a transition towards CORSIA. Relevant keywords could be *mutual/individual/common gains, benefits and interests; common norms and rules; as well as identity and self-understanding*.

An alternative analytical tool that could possibly have been used for this research is that of ideal types. Ideal types are used to categorise data in fixed boxes and thus make it possible to assess to what extent a studied phenomenon corresponds to an ideal type.<sup>88</sup> However, the use of dimensions and parameters are preferred as they allow for a more nuanced and flexible analysis, as keywords are gathered based on how well they fit within the interpretation span of the dimensions.<sup>89</sup>

In making use of qualitative concept analysis, moreover, this study contributes to the analytical generalisability of international cooperation research.<sup>90</sup> Becker maintains that it is possible to see concepts as empirical generalisations, that can be developed and tested through empirical research.<sup>91</sup> However, this is not without implications. Becker underlines the problem that may arise when the theoretical attributes of a concept are not sufficient to account for the empirical findings, which makes the concept less generalisable. In order for the researcher to be able to analyse these findings, the attributes of the concept need to be refined.<sup>92</sup> This may result in the development of existing theories. With regard to this specific study, there is reason to believe that the neoliberal

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<sup>88</sup> Bergström, Göran & Boréus, Kristina. (2012)., p. 150-151

And

Esaiasson, Peter., Gilljam, Mikael., Oscarsson, Henrik, & Wängnerud, Lena. (2012) *Metodpraktikan*. Stockholm: Norstedts Juridik., p. 140

<sup>89</sup> Hylén, Jan. (1991) *Fosterlandet främst?* Stockholm: Norstedts Juridikförlag., p. 8-9

<sup>90</sup> Hyde, Kenneth. F. (2000)., p. 84

<sup>91</sup> Becker, Howard, S. (1998) *Tricks of the Trade: How to Think about Your Research While You're Doing It*. The University of Chicago Press. Chicago and London., p. 128

<sup>92</sup> Becker, Howard, S. (1998)., p. 130-131

institutionalist one-sided focus on states and the neglect of the temporal aspect of state interests, as identified in the theory section, are attributes that may possibly give rise to this sort of problem.

## Material

Against the background of the method chapter, this chapter will introduce the empirical material that will be used to provide an understanding of why the Commission has decided to support a transition from the EU ETS towards CORSIA. This material serves as the empirical starting point for the analysis. The chapter will also present how the material has been collected.

It was towards the end of 2016, in connection with the adoption of the ICAO Resolution A39-3, that the debate on a possible transition from the EU ETS towards CORSIA gained momentum. This is why the collection of material has been limited to the period late 2016 to 2019. This is a reasonable limitation considering the scope of this study. Even if the ambition has been to cover all the available material on the topic from this period, it is possible that some material has been left out unintentionally. It should be noted, furthermore, that the development of CORSIA is an ongoing process and that new materials may have been published during the time of writing.

In the search for material, the following primary keywords have been used: *EU emission trading scheme, global emission trading, EU ETS* and *CORSIA*. These keywords have been used in combination with a number of subordinated keywords, including *aviation, market based measures, Commission, debate, directive, regulation* and *legislation*. Also snowball sampling has proved useful in the collection of material. Whereas some materials derive directly from the Commission's debate on the EU ETS in relation to CORSIA, other materials treat the general emission reduction policy. Following the presented search criteria and in consideration of validity, documents used in this research have been gathered only from its source of origin. Where several versions of a text are available, only the final versions have been collected.<sup>93</sup>

Of the materials that directly focus on the EU ETS in relation to CORSIA, three pieces of material deserve particular attention. The first is a debate in the European Parliament on the EU ETS and preparations for the implementation of a global market-based measure, attended by climate action and energy Commissioner Miguel Arias Cañete.<sup>94</sup> The second is a hearing in the European Parliament on the development of CORSIA, attended by transport Commissioner Violeta Bulc.<sup>95</sup>

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<sup>93</sup> Silverman, David. (2014) *Interpreting Qualitative Data*. London: Sage., p. 90-91

<sup>94</sup> Debate in the European Parliament 11-09-2017. Item number three on the agenda: EU Emissions Trading System (EU ETS): continuing current limitations of scope for aviation activities and preparing to implement a global market-based measure from 2021

<sup>95</sup> ENVI committee meeting in the European Parliament 19-11-2018. Item number two on the agenda: Exchange of views with Ms Violeta Bulc, Commissioner for Transport, on ICAO's CORSIA developments

The role of the Commissioners is to represent the Commission and the EU more broadly. As such, what the Commissioners express in debates and hearings arguably says something about the Commission's views and motivations. Therefore, the two events are of particular importance for this study. The two events are also the best alternative to an interview with the Commission, which is difficult to get. They are also examples of situations where the Commissioners are put under pressure and are forced to respond to questions before both Members of the European Parliament (MEPs) and the public, making them potentially more likely to unintentionally express motives for actions than written communication from the Commission. The third is an impact assessment on the implementation of the global market based measures for aviation emissions.<sup>96</sup> This text expresses the Commission's views of potential advantages and disadvantages of a transition from the EU ETS towards CORSIA.

The debate with Commissioner Cañete has already been transcribed by the European Parliament. The hearing with Commissioner Bulc, however, is only publicly available in the form of a video recording and therefore had to be transcribed for the purpose of this research.<sup>97</sup> The transcription of the hearing is made to make sure that all the empirical material used for this study is more accessed and analysed. This also increases the reliability of the analysis.<sup>98</sup>

In addition to the three pieces of material introduced above, two pieces of legislation, one regulation, which amends the EU ETS directive<sup>99</sup> to prepare for the implementation of a global market based measure from 2021,<sup>100</sup> and one delegated regulation on the implementation of ICAOs MRV-standards, which supplements the EU ETS directive,<sup>101</sup> have been analysed. This data serve to provide the legislative basis of the study.

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<sup>96</sup> Impact Assessment - Of the proposal for a regulation of the European Parliament and of the Council amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community in view of the implementation of a single global market-based measure to international aviation emissions.

<sup>97</sup> The transcribed document can be found in the appendix to this study.

<sup>98</sup> Silverman, David. (2014)., p. 87-88

<sup>99</sup> The EU ETS directive refers to "Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC".

<sup>100</sup> Regulation (EU) 2017/2392 of the European Parliament and of the Council of 13 December 2017 amending Directive 2003/87/EC to continue current limitations of scope for aviation activities and to prepare to implement a global market-based measure from 2021.

<sup>101</sup> Commission Delegated Regulation (EU) .../... of 6.3.2019 supplementing Directive 2003/87/EC of the European Parliament and of the Council as regards measures adopted by the International Civil Aviation Organisation for the monitoring, reporting and verification of aviation emissions for the purpose of implementing a global market-based measure.

The materials that treats the broader emission reduction policy includes one communication on the Commission's long-term climate vision,<sup>102</sup> and one in-depth analysis that supports this communication.<sup>103</sup> These two pieces of material express the Commission's general vision of global cooperation and emission reduction efforts.

Even if the written material do not leave the same room for opinions as the two events in the European parliament, they are considered as an expression in text of the Commission's motives and incentives for supporting a transition towards CORSIA. Secondary material is also used to support the argument put forward in this study. Example of such material is the Paris agreement<sup>104</sup> and the ICAO Resolution A39-3<sup>105</sup>.

From this backdrop, the analysis is divided into three sub chapters, one for each dimension. Key words and sentences in the analysed material are sorted into one of the relevant dimensions, agency, dependence and logic of choice and discussed in one of the three sub chapters. The chapter will follow by a concluding discussion.

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<sup>102</sup> Communication from the Commission to the European Parliament, The European council, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank - A Clean Planet for all - A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy.

<sup>103</sup> In-Depth Analysis in Support of the Commission Communication COM(2018) 773. A Clean Planet for all A European long-term strategic vision for a prosperous, modern, competitive and climate neutral economy.

<sup>104</sup> United Nations (2015). The Paris Agreement, 21st Conference of the Parties, Paris: United Nations.

<sup>105</sup> ICAO Resolution A39-3. (2016) *Consolidated statement of continuing ICAO policies and practices related to environmental protection – Global Market-based Measure (MBM) scheme.*, p. 1



## **Analysis**

The following chapter will analyse the empirical material with a view to answer the research question *how can neoliberal institutionalism explain why the European Commission, despite the identified risks, is in favour of a transition from the EU ETS towards CORSIA?* The chapter is divided into three subsections, one for each of the three dimension. As mentioned above, the dimensions are innately interrelated, which makes a certain overlap between the three sections unavoidable.

### *Agency*

The first dimension to be accounted for is that of agency. Starting from the Commission's Regulation, reads that "key features of the global market-based measure have yet to be developed and that its implementation depends on domestic legislation laid down by participating States and regions".<sup>106</sup> In this piece of legislation, the Commission specifically recognises states and regions as important actors in the developing process of CORSIA. With regard to emission reduction in general, the Commission's Communication further outlines the aim to "inspire as well as enable stakeholders, researchers, entrepreneurs and citizens alike to develop new and innovative industries, businesses and associated jobs."<sup>107</sup> This quote shows the Commission's ambition to extend the scope of agency to a broader inclusion of non-state actors.

The desired contribution of both states and non-state actors within the field of emission reduction have been outlined by the Commission. With regard to the national level, the Commission's In-depth analysis concludes that the member states have a key role in developing policies for an effective transition to a low-carbon future. Many member states have already agreed to work towards the target of net zero emissions by 2050 at the latest and have submitted national long-term strategies for this purpose.<sup>108</sup> The member states are, based on the set EU emission reduction targets, expected to develop policy and be aware of the long-term aspect of these targets. As for the local level, local authorities contribution to emission reduction has increased since a large part of the European citizens today lives in cities. As put forward in the studied In-depth analysis, local governments are of particular importance in developing, implementing and enforcing climate policies for emission reduction. Cross-border cooperation is further underlined as an effective tool

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<sup>106</sup> Regulation (EU) 2017/2392., p. 9

<sup>107</sup> Communication (2018)., p. 23

<sup>108</sup> In-Depth Analysis (2018)., p. 287

for promotion of solutions and to address climate challenges, something European cities have successfully demonstrate by various networks and cooperations. To contribute to emission reduction even further, the Commission also recommends and try to influence these local actors to develop long-term strategies.<sup>109</sup> The Commission further outlines the roles of businesses and the civil society. With regard to businesses, the Commission wants the private sector to further contribute to emission reduction.<sup>110</sup> Airlines are put forward as important actors for the EU emission reduction commitments and the aviation sector has also agreed to take on long term objectives, making it the first of its kind to commit to a long-term plan for climate action.<sup>111</sup> By 2050 the aviation sector is committed to reduce net emissions by 50 percent compared to 2005 levels.<sup>112</sup> The Commission also considers public consultations as an important instrument, to strengthen the link to the business community and to collect useful insight in the work on carbon reduction, in order to get different stakeholders views on long-term GHG emission reduction.<sup>113</sup>

As for individuals, the Commission suggests that the civil society should work to create awareness of long-term measures for decarbonisation and contribute to the creation of norms to influence citizens lifestyles.<sup>114</sup> In the material the Commission maintains that "[s]trong public participation and ownership will not only help accelerate the implementation of current commitments in the EU, but can also help strengthen global efforts in the short, medium and long-term."<sup>115</sup> Emission reduction efforts on an individual level can therefore contribute to better global measures. This is further strengthened by fact that the "[c]ivil society organisations have already come forward to support countries, local governments and businesses to come up with and understand long-term plans, even beyond 2050."<sup>116</sup> This quotation underscores the Commission's wish for actors within all sectors of the society to contribute to emission reduction by the EU set long-term goals. The above not only further confirms the Commission's broad view of agency, it also outlines what the Commission expect from these actors.

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<sup>109</sup> In-Depth Analysis (2018), p. 288

<sup>110</sup> In-Depth Analysis (2018), p. 290

<sup>111</sup> Air Transport Action Group, Climate Change.

<sup>112</sup> In-Depth Analysis (2018), p. 37

<sup>113</sup> In-Depth Analysis (2018), p. 290

<sup>114</sup> In-Depth Analysis (2018), p. 290-291

<sup>115</sup> In-Depth Analysis (2018), p. 290

<sup>116</sup> In-Depth Analysis (2018), p. 290-291

Based on the above findings, it seems reasonable to suggest that the Commission recognises several actors of importance for emission reduction. The Commission pushes these actors to develop long-term strategies and work in accordance with the EU's long-term environmental targets for emission reduction. These non-state actors, mentioned by the theory but not recognised in the same degree as in the studied material, cannot themselves enter international institutions but are however still expected to apply and abide by the agreements. Perhaps the most complex from a temporal perspective is that of individuals and civil society. It is reasonable to believe that there are major temporal differences between individual's "long-term planning" and the Commission's preferred long-term approach with goals for 2050. This factor is something that is not foreseen by the neoliberal institutionalist framework which opens for a completely new type of temporality.

The Commission's Regulation further reads that "[s]ince the objectives of this Regulation, namely to extend the current limitations of scope for aviation activities until 31 December 2023 and to prepare to implement a global market-based measure from 2021, cannot be sufficiently achieved by the Member States but can rather, by reason of its scale or effects, be better achieved at Union level."<sup>117</sup> This tells something about the Commission's understanding of the EU's role in emission reduction, which relates to the above mentioned complexity of the EU's dual identity as both an international institution and an international organisation. The statement in the material goes in line with the EU as an institutional actor providing an arena for the development of common standards and regulations for emission trading in line with the global scheme. The Commission's delegated regulation, on the other hand, provides that "[t]he Union is amongst the first jurisdictions to adopt legally binding legislative provisions for the purposes of implementing ICAO's scheme [...], while other States are also expected to undertake such domestic implementation."<sup>118</sup> This suggests the EU's desire and willingness to be a leading actor in global emission reduction, which relates to its identity as an international organisation. This is also expressed in the Communication, where the Commission maintains the EU's aim to remain a leading multilateral actor and together with international partners work with ICAO to promote the work of decarbonisation.<sup>119</sup> International partners are in this case other states, suggesting the Commission's consideration of the EU as an state-actor and further strengthening the EU's organisational identity within the international community.

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<sup>117</sup> Regulation (EU) 2017/2392., p. 10

<sup>118</sup> Commission Delegated Regulation (2018)., p. 1

<sup>119</sup> Communication (2018)., p. 11-12

The above statements seem to suggest that the EU have different roles – a dual identity – when it comes to the development of CORSIA. The EU can be seen as both an international organisation, participating within the institution of CORSIA, as well as an institution, promoting different norms for its member states. Both roles suggest the Commission’s view of the EU as an important actor in the context of global emission reduction.

To sum up this section, it could be argued that, in line with the neoliberal institutionalist framework, states are considered to play an important role in emission reduction and the development of CORSIA. The EU’s twofold identity, in line with the above definition of both international institutions and international organisations, makes its agency difficult to apply.

However, the empirical material also shows the Commission’s focus on a broad spectrum of actors of importance for emission reduction who are expected to contribute to the EU’s long-term emission reduction targets. This approach differs from the neoliberal institutionalist line of thought, which only consider states to be of importance within institutions. Non-state actors are neglected even though they still are affected by states international commitments. The recognition of different non-state actors from various levels of the society moreover opens up for new temporal aspects not taken under consideration by the theory.

The fact that the EU actually recognises various actors of importance for institutions not only strengthen the argument of the narrowed focus of neoliberal institutionalism, it also provides an example of institutional impact on actors within institutions.

### *Dependence*

With regards to the second dimension dependence, the Commission suggest in its In-depth analysis that:

”[w]orking together, learning from each other and scaling up successful approaches, are essential. Targeted programs or platforms for different sectors are good practice for enabling and creating relevant knowledge and organisational capacity. Strengthening these platforms, promoting the cooperation between stakeholders and the sharing of experiences are crucial to accelerate and scale up climate action.”<sup>120</sup>

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<sup>120</sup> In-Depth Analysis (2018), p. 291

This paragraph goes hand in hand with the neoliberal institutionalist assumption of institutions discussed above (how they are considered as "persistent and connected sets of rules (formal or informal) that prescribe behavioral roles, constrain activity, and shape expectations."<sup>121</sup>). The statement shows the Commission's view of international cooperation as an effective arena to manage global climate action. It is further suggested in the empirical material that international cooperation is needed to create "a positive momentum to enhance global climate ambition; share knowledge and experience in developing long-term strategies and implementing efficient policies"<sup>122</sup>. This shows the Commission's perception of international institutions and cooperation as important to facilitate the development of common policies and information exchange.

When CORSIA was discussed in the European Parliament, Cañete argued that "[o]n the one hand, we need to facilitate international developments and get ready to implement CORSIA. On the other hand, we will have to discuss the future rules for the European Union ETS in a context where CORSIA becomes a reality."<sup>123</sup> This paragraph tells that CORSIA is considered a better option compared to the regional EU ETS. The Commission supports CORSIA and the EU ETS could possibly be sacrificed. During the debate Cañete however underlined that CORSIA's offsetting instrument is not the preferred instrument by the Commission. The Commission rather wanted a global emission-trading-scheme, but an offsetting mechanism was the only instrument the international community could agree upon.<sup>124</sup> Cañete moreover argued that if the EU would not be satisfied with the results of the developed global scheme, or if other countries not fulfill their commitments, the EU could decide to go back to their own scheme and address global emissions on their own.<sup>125</sup> This says something about how the Commission considers global cooperation. Even though ICAO's targets are less ambitious than the EU's, the Commission is still considering CORSIA as the preferred scheme for emission reduction. This reasoning strengthens the argument that a transition to CORSIA is done in line with the belief of the interdependent nature of aviation emissions. Emission reduction is a global problem and it would be more effective to address it on a global level.

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<sup>121</sup> Keohane, Robert. O. (1988), p. 383

<sup>122</sup> Communication (2018), p. 25

<sup>123</sup> Debate in the European Parliament 11-09-2017., p. 3

<sup>124</sup> Debate in the European Parliament 11-09-2017., p. 11

<sup>125</sup> Debate in the European Parliament 11-09-2017., p. 3

CORSIA and its anticipated environmental contribution was also discussed in the European Parliament by transport commissioner Violeta Bulc.<sup>126</sup> Bulc pointed out that even though the EU ETS is seen as a scheme with higher ambitions than CORSIA and that many uncertainties still remain, concerning the effectiveness of the scheme, the EU ETS can not by itself address global aviation emissions in a sufficient and effective manner.<sup>127</sup> The Commissioner further said that

”in 2021 to 2035 EU ETS will sort of cover 956 empty CO2 emissions. When if we take a look at the CORSIA that in the similar period, in the same period, will represent 2711 empty [CO2 emissions]. So for me, this is a huge motivation in order to get CORSIA onboard. And, I understand in a way frustration because we believe we have a better system than that the world wants to commit to. But the pollution does not know the borders, and for me it is a huge motivation to get the world behind the commitments in order to get the global effect going.”<sup>128</sup>

This quotation clearly state the Commission’s view of global commitments. Even though CORSIA has no finalised rules or targets and the fact that the EU ETS is considered to be a stronger scheme from an environmental point of view, a broader scheme with its potential to be an effective arena due its global nature is considered as a necessary measure.

The Commission further states in its Long term strategy that there is a need to ”[a]nticipate and prepare for geopolitical shifts, including migratory pressure, and strengthen bilateral and multilateral partnerships, for instance by providing support to third countries in defining low-carbon resilient development through climate mainstreaming and investments.”<sup>129</sup> This show the issues complex interrelatedness, and helping others overcome obstacles will in the long run contribute to a better climate.<sup>130</sup> This statement therefore say something about the Commission’s understanding of the issue’s scope, how emissions cannot be sufficiently reduced without taking other global issues into consideration and how it contributes to the complex interdependent relationship between countries.

The Commission’s Impact assessment further stresses that if the EU choose to introduce the full scope of the EU ETS instead of or during the development of CORSIA, this would result in widespread dissatisfaction from countries outside of the EEA. Such an action could be interpreted

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<sup>126</sup> ENVI committee meeting in the European Parliament 19-11-2018., Transcript p. 1-3

<sup>127</sup> ENVI committee meeting in the European Parliament 19-11-2018., Transcript p. 1-3

<sup>128</sup> ENVI committee meeting in the European Parliament 19-11-2018., Transcript p. 6

<sup>129</sup> Communication (2018)., p. 25

<sup>130</sup> Communication (2018)., p. 22-23

as a statement of reluctance of the development of a global market based mechanism for aviation emissions by the international community.<sup>131</sup> Also Commissioner Cañete underlined this issue, where he said that an introduction of the full scope of the EU ETS would possible result in dissatisfaction from, and jeopardising the relationship with non-EU countries.<sup>132</sup> This material shows the Commission's interest in maintaining its international reputation and how state relations are important.

In line with this, the issue of whether or not to file differences to ICAO towards CORSIA was touched upon by Commissioner Bulc. Many MEPs were reluctant to not filing differences to towards CORSIA, as the absence of such action would possibly lead to the disclosure of the EU's emission reduction approach from a final ICAO agreement. The MEPs even advocated for the Commission to file reservations (which could be seen as a stronger contradiction) towards CORSIA.<sup>133</sup> Commissioner Bulc's answer to this critique was although very straight forward. She said that "I am against filing the reservation, I am for stating the differences very clearly on ICAO level and making sure that they understand under which conditions we are entering this deal. But if EU shows weaknesses, if EU is not leading the way, then it is quite likely that this will not happen."<sup>134</sup> This discussion show how the Commission is worried about CORSIA's survival if the EU is too aggressive in its demands. A possible reason for this could be the view of global cooperation as more important in itself, rather than the environmental standards. Bulc however said that the Commission still works to safeguard the EU ETS. "Instead of reservation we focused on differences, and point out these differences and then of course bring them together, this our intention, to bring together ETS and CORSIA. I also like to say that whatever we agree will not go into force before 2020. That gives us enough time that we do a thorough impact assessment analysis of the full scheme."<sup>135</sup> From the empirical material it seems like the Commission wants to be a leading actor and negotiate aggressively by filing its dissatisfaction with the scheme, with the possible result of stronger environmental standards. At the same time this discussion shows how the EU's global reputation and relations with other states is regarded as more important. This tell something about the Commission's priorities. Global cooperation is potentially worth more than the EU's desired environmental standards. However, the last sentence further show how the

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<sup>131</sup> Impact Assessment (2017)., p. 10

<sup>132</sup> Debate in the European Parliament 11-09-2017., p. 11

<sup>133</sup> ENVI committee meeting in the European Parliament 19-11-2018., Transcript p. 1-3

<sup>134</sup> ENVI committee meeting in the European Parliament 19-11-2018., Transcript p. 10

<sup>135</sup> ENVI committee meeting in the European Parliament 19-11-2018., Transcript p. 15

Commission constantly point to possible emergency exits, if the scenario changes and the global scheme no longer can be seen as a suitable option.

To conclude this section, CORSIA constitutes a global arena which is supposed to facilitate emission reduction within the aviation sector. CORSIA could therefore be considered an international institution for global emission reduction. In line with the neoliberal institutionalist framework it has been shown how the Commission in various ways consider cooperation as an effective instrument to handle climate change. Supporting CORSIA would mean that the EU is losing its freedom, its independence, to decide over its emission reduction policy. The fact that the Commission is reluctant to negotiate too aggressively may moreover also be considered as an effect of influences from the institutional level on its participating actors. Actors interests change based on interdependence and the EU bases its actions on other actors actions.

As the European Parliament is the only directly elected body of the EU institutions, the MEPs concerns of whether to file differences or not can be interpreted as a situation where the individual level of agency engage in the negotiation. The strong uncertainty towards CORSIA may derive from the temporal gap between the EU and the individual level. The Commission has experience of, and are forced to plan decades in advance, where potential future benefits of entering CORSIA would justify the Commission's support of the scheme. The potential direct environmental loss that comes from a transfer to a weaker scheme than the EU ETS may, however, for the individual level be more difficult to grasp.

### *Logic of choice*

With regard to the third dimension logic of choice, actors are driven by various interests and norms. As highlighted above by Aakre and Hovi, states join institutions based on different motives. Interest-driven states are more reluctant to join voluntary international institutions if other interests are threatened. As already mentioned, 71 states have announced their participation in the first voluntary phase of CORSIA. It should however be noted that countries outside of the EU have already opted out from the agreement. Important states like China, USA and Russia have moreover announced that they will join first in the second phase of the scheme.<sup>136</sup> At the hearing in the European Parliament, Bulc briefly mentioned that states appear to be reluctant to join CORSIA

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<sup>136</sup> ENVI committee meeting in the European Parliament 19-11-2018., Transcript p. 5-6



from a sovereignty point of view, as well as fear of falling behind in the development of their aviation industry.<sup>137</sup> Drawing on this, some states seem to be reluctant to join CORSIA based on short-term economic interests. Based on the fact that CORSIA is a voluntary scheme and it is impossible for the global community to force member states to join. There is no guarantee that states who have promised to join in a later phase actually will fulfill their promise. It is reasonable to believe that the scheme would risk to fall apart if important states like China, USA and Russia would choose to abstain from participation.

Airlines for its part, has also showed interest in the scheme. The International Air Transport Association, IATA, maintain that "[t]he implementation of CORSIA will avoid the need for existing and new carbon pricing measures to be applied to international aviation emissions of a regional or national basis."<sup>138</sup> By the use of a global uniform scheme the costly process of bringing different schemes together and to make them co-exist will be eliminated.<sup>139</sup> CORSIA brings manageable costs for actors within the aviation sector "especially when compared with the costs that would result from multiple national or regional schemes, which would generate divergent compliance requirements for individual operators and therefore also increase the risk of market distortions."<sup>140</sup> CORSIA is therefore considered as an effective scheme in order to avoid the costly patchwork of different carbon reduction instruments.<sup>141</sup>

With regards to the EU, its motives to join CORSIA can be found in the Commission's Impact assessment, holding that the EU must ensure a transition to CORSIA that contribute to emission reduction to its maximum, at the same time as the EU environmental targets are reached.<sup>142</sup> At the Parliamentary hearing, Bulc further expressed that "[o]ur objective is simple, to reduce CO<sub>2</sub> emissions from aviation. That is no doubt about that. Together our job is twofold, to obtain the most ambitious deal possible within ICAO with the widest possible international coverage while not jeopardising the EU ETS for aviation."<sup>143</sup> This together with Bulc's above presented data ("in 2021 to 2035 EU ETS will sort of cover 956 empty CO<sub>2</sub> emissions. When if we take a look at the CORSIA that in the similar period, in the same period, will represent 2711 empty [CO<sub>2</sub>

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<sup>137</sup> ENVI committee meeting in the European Parliament 19-11-2018., Transcript p.1-3

<sup>138</sup> IATA (2018)., Carbon Offsetting for International Aviation. p. 2

<sup>139</sup> IATA (2018)., p. 2

<sup>140</sup> IATA (2018)., p. 2

<sup>141</sup> IATA (2018)., p. 2

<sup>142</sup> Impact Assessment (2017)., p. 17

<sup>143</sup> ENVI committee meeting in the European Parliament 19-11-2018., Transcript p. 1-3

emissions].”<sup>144</sup>), show how the Commission view CORSIA’s potential environmental effectiveness, which could be considered as a motive for a transition.

This however contradicts with the Commission’s own statements in its Impact assessment, saying that the global scheme ”is unlikely to result in a significant in-sector reduction of GHG emissions in the period up to 2035, which is insufficient under the Paris Agreement”.<sup>145</sup> It further states that the initial phase of CORSIA would create a 20 percent gap of emission growth that will not be offset.<sup>146</sup> These two statements not only recognises the Commission’s awareness of the weaker environmental scope of CORSIA, it also underline that it to this point is impossible to predict to what extent the aviation sector will contribute to EU’s environmental goals within CORSIA.<sup>147</sup> Drawing on this, it might be complicated for the EU to reach its set environmental goals if a transfer to CORSIA besoms reality. It also indicates that the environmental benefits might not be the Commission’s main interest for a transition to CORSIA. It is possible that the Commission consider CORSIA as something more than a global scheme for emission reduction.

The fact that CORSIA is a scheme that build on offset credits could also strengthen this argument, since these credits will not contribute to the NDCs. Offset credits from international projects are today valid credits within the EU ETS. However, it is still not clear if this will be the case after 2020.<sup>148</sup> Even if the Commission would propose a continued allowance of these international credits within the EU ETS, the EU has committed to reach member states NDC’s without the use of international credits.<sup>149</sup> This leads to a situation where the EU’s future emission reduction efforts within CORSIA would not contribute to the set NDC's, resulting in difficulties for the member states to achieve their environmental targets.

This leads to the suspicion that other interests form the basis of the Commission’s support of CORSIA. Various other potential motives are identified in the empirical material. In its Impact assessment, the Commission states that during both the preparatory period of CORSIA (2017-2020) and the post 2020 period, the EU works to ”[m]aintain the competitiveness level in the aviation

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<sup>144</sup> Transcript sida 62

<sup>145</sup> Impact Assessment (2017)., p. 9

<sup>146</sup> Impact Assessment (2017)., p. 8

<sup>147</sup> Impact Assessment (2017)., p. 11

<sup>148</sup> European Commission, *Use of international credits*.

<sup>149</sup> Latvia Presidency of the Council of the European Union (2015). Submission by Latvia and the European Commission on Behalf of the European Union and its Member states. Intended Nationally Determined Contribution of the EU and its Member States., p. 2

sector and the level playing field in the internal market for aviation”.<sup>150</sup> This statement recognises that the Commission sees both economic and competitive interests in a transition towards CORSIA. The Commission also holds that during a transition to CORSIA, the aim is to ensure that the environmental targets are reached without the EU economy taking any damage and for the relationship with ICAO to be as good as possible.<sup>151</sup> This statement says something about the Commission's view of economic interests as superior environmental interests.

The Commission's competitive interest is further addressed in the Impact assessment, pushing for early preparations of the global scheme in order for the aviation industry, the member states and other actors to be well prepared when the scheme is supposed to enter into force in 2021.<sup>152</sup> In its Delegated regulation, the Commission maintains the importance of equal treatment of the actors within the aviation sector, on all routes both within and outside of the EEA.<sup>153</sup> This shows how the support of CORSIA partly may be based on the Commission's fear of competitive disadvantages if the EU is isolated from the world.

The Delegated regulation further shows the Commission's view of economic benefits superior to its environmental interests, by saying that “[i]t is in the self-interest of aircraft operators to report their emissions data for international flights in 2019 and 2020 as it will reduce the emissions they will have to offset later.”<sup>154</sup> If airlines fail to report their emissions during this period, “the SARP foresees using other information source to fill gaps”.<sup>155</sup> These two statements show how the Commission prioritises the European aviation sector's short term economic interests (which in a way can be seen as its own economic interests) over its environmental interests. A higher quota for offsetting of emissions would, in the future, result in the offsetting of more emissions. Now the Commission helps the aviation sector to avoid its commitments under CORSIA.

The above discussion has shown the Commission's environmental and economic motives to support CORSIA. One option discussed by the Commission, in order to “obtain the most ambitious deal possible within ICAO with the widest possible international coverage”<sup>156</sup>, at the same time as “not

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<sup>150</sup> Impact Assessment (2017), p. 17-18

<sup>151</sup> Impact Assessment (2017), p. 17

<sup>152</sup> Impact Assessment (2017), p. 11

<sup>153</sup> Commission Delegated Regulation (2018), p. 3

<sup>154</sup> Commission Delegated Regulation (2018), p. 3

<sup>155</sup> Commission Delegated Regulation (2018), p. 3

<sup>156</sup> ENVI committee meeting in the European Parliament 19-11-2018., Transcript p. 1-3

jeopardising the EU ETS for aviation”<sup>157</sup>, could possibly be to allow a parallel use of the two schemes. Bulc expressed the Commission’s intention to participate in CORSIA and keep the aviation sector within the EU ETS during the hearing in the Parliament. She said that ”I am personally convinced we can find ways to combine CORSIA and the EU ETS in a way that is consistent with EU commitments under the Paris agreement and does not jeopardise ICAO:s efforts in favor of a global solutions.”<sup>158</sup> This show the Commission’s attempt to merge its rational perception of potential future economic benefits of global cooperation with its identity of an organisation with far-reaching environmental roots.

However, the following two paragraphs which can be found in ICAO Resolution A39-3, speaks against this reasoning:

*Noting* the support of the aviation industry for a single global carbon offsetting scheme, as opposed to a patchwork of State and regional MBMs, as a cost effective measure to complement a broader package of measures including technology, operations and infrastructure measures;<sup>159</sup>

And

*Recognizing* that MBMs should not be duplicative and international aviation CO<sub>2</sub> emissions should be accounted for only once;<sup>160</sup>

Even though a parallel use of the two schemes could be seen as beneficial, a combination of the schemes might not be as simple as Commissioner Bulc expresses at the hearing. By supporting CORSIA, based on these two paragraphs, it is possible that the aviation sector would need to be phased out from the EU ETS.<sup>161</sup> As mentioned above, previous research also points to the negative effects of a parallel use of two or more emission reduction scheme. Without sufficient rules airlines within the EU ETS would be encourage to buy allowances or to use offset credits from the lowest selling actor on the market, which today seems to be ICAO. Even if it would be possible to combine the two schemes, the parallel use of EU ETS and CORSIA would therefore also be ineffective from an environmental perspective as the prices on allowances would fall and it would be cheaper for airlines to mitigate. If sufficient rules would be in place, however, the EU would most likely have to

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<sup>157</sup> ENVI committee meeting in the European Parliament 19-11-2018., Transcript p. 1-3

<sup>158</sup> ENVI committee meeting in the European Parliament 19-11-2018., Transcript p. 1-3

<sup>159</sup> ICAO Resolution A39-3 (2016)., p. 1

<sup>160</sup> ICAO Resolution A39-3 (2016)., p. 1

<sup>161</sup> Environmental Defense Fund (2018) *Global Emissions Within and Outside the Scope of Nationally Determined Contributions - A Preliminary Analysis of “Double Counting” Risks for Internationally Transferred Mitigation Outcomes.*

lower its prices on allowances to be able to satisfy the preferences of other participating states, also this leading to a lower price on allowances.

In conclusion, various actors have different motives in joining institutions. In line with the theoretical framework, states and airlines have showed to act according to its rationality. This also applies to the EU. Based on the empirical material, it has however been possible to identify different interests that can be the basis for the Commission's support for the global scheme. Once again, the temporal aspect is shown in the EU's long-term environmental interest and its short-term economic focus.

From an environmental point of view, the Commission arguing for the importance of global cooperation in order to combat environmental hazards. Much however point to the fact that CORSIA will consist of substantially weaker targets than those of the existing EU ETS, which, together with statements in the empirical material, suggest that environmental result of the scheme is not the Commission's main reason for a transfer. The fact that the EU informs the aviation sector on how it best avoids offsetting clearly shows the rationality in the Commission's way of acting.

## **Concluding discussion**

This chapter will discuss the main findings of the empirical analysis in order to explicitly address the research question *how can neoliberal institutionalism explain why the European Commission, despite the identified risks, is in favour of a transition from the EU ETS towards CORSIA?*

By applying a neoliberal institutionalist framework on the empirical material, several links between the theory and the studied case have been identified. With regard to the first dimension agency, it has been noted that the development of CORSIA brings together different types of actors that are all considered to play important roles when it comes to emission reduction. The national and regional level are highlighted as important for the direct development of CORSIA, at the same time as local actors, companies and civil society are expected to contribute to emission reduction in general. Even if it is only states that can enter international institutions, the Commission expects these non-state actors to contribute to emission reduction according to the EU's set long-term commitments. These identified actors, however, have different interests in participating in institutions, interests that are of various temporal perspectives. Something that is not recognised by the theory.

The Commission also sees the EU as a global actor with a prominent role in the context of the development of CORSIA. This recognition of various different non-state actors however is inconsistent with the neoliberal institutionalist assumption according to which states are the only important actors within international institutions. The theory does admit the existence of non-state actors, but not sufficiently recognises their agency within institutions. This is also something that has been underlined by Saryal, who calls for the development of how neoliberal institutionalism treats agency.

As for the dimension of dependence, the empirical material show direct similarities between the neoliberal institutionalist definition of institutions and how the Commission regards international cooperation and expected benefits resulting from these. The coordination of global emission reduction measures affect several policy fields, making the relationship to other states important and shows the complex and multi-faceted nature of emission reduction. In turn, this helps explain the Commission's motives and drive for international cooperation. It might even be possible to argue that this example is compatible with Keohane and Nye's concept of complex interdependence.

It goes without arguing that emissions are a cross-border threat that affects all countries in the world. To meet this threat, the Commission expresses the potential environmental benefits that comes with cooperation, as well as the assumed costs for the EU of staying outside of CORSIA. In line with this discussion, by giving up the freedom to regulate aviation emissions, countries can come together to work for a better environment and take part of the benefits that may come out of cooperation.

As regards the logic of choice, it is shown in the empirical material that different actors are driven by different motives to enter international institutions or stay independent. States seems to, in line with previous research, be driven by both interests or norms. The short-term economic interest of non-state actors can be further related to actors' rationality within the neoliberal institutional line of thought. Not only is there from a temporal point of view a clash between different actors interests, The EU's short-term economic benefits may also clash with its more long-term environmental interests. It is therefore reasonable to believe that the Commission is motivated by both norms from its identity as a global environmental actor, and as an actor with strong economic interests. The analysed material, however, shows that supporting CORSIA would generate short-term economic and competitive gains for the EU. Based on the paradoxical nature of the issue, where the EU's substantial environmental commitments to the Paris agreement would be difficult to reach based on the today insufficient ICAO regulation, a transfer towards CORSIA would possibly be motivated by economic and competitive interests.

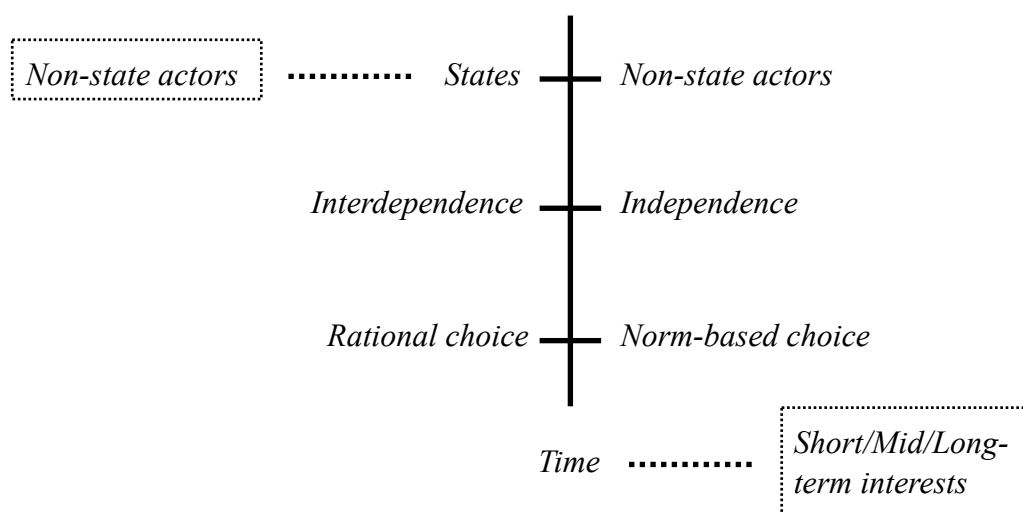
As shown, the neoliberal institutionalist assumptions can, to a certain extent, provide an understanding of the Commission's support for a transfer from the EU ETS towards CORSIA and therefore also meets the first aim of this study. However, the two factors *actors* and *time* have been identified as neglected in the theoretical framework. As for the factor of actors, it could possibly be argued that there is a need for additional recognition of the importance of non-state actors within institutions. From this follows the need for a refinement of the agency concept within the theoretical framework of neoliberal institutionalism. There is not necessarily a need for the theoretical framework to treat all the different actors as equal, since it is only states that can enter into global agreements (an airline or an individual cannot, for example, apply for a membership in CORSIA). Instead, as this study shows, the Commission's support for CORSIA seems to be motivated by its economic interests, which in this case is closely interrelated with airlines economic interests (non-state actors affected by the Commissions decision whether or not to join CORSIA). The refinement

of the agency concept should therefore put greater emphasis on the *role* of these non-state actors and their *interests* within institutions.

When it comes to the temporal aspect of actors' interests, it has been shown that the Commission pursues a policy where it wants these different identified actors to take on long-term commitments. The fact that the Commission pushes more short-term non-state focused actors to work in accordance with the EU's preferred long-term operation can be seen as a paradox, as these non-state actors can not by themselves enter into international agreements. The research also indicates the temporal factor of the EU's dual interests, making it strive for both short-term and long-term interests.

This discussion leads to the second aim of this research, the possible contribution to the further development of neoliberal institutionalism. The research has thus showed that; (a) more actors than states are of importance for the formation of institutions and; (b) the problem of clashing interests is complicated and the temporal aspects of different actors interests need to be taken into account. In an effort to contribute to the development of neoliberal institutionalism and to make the theory better fit for this study, the above developed analytical framework have been complemented with the two factors not sufficiently accounted for by the mainstream neoliberal institutionalist scholars. The following figure shows the potential development of the theoretical framework and the contribution of this study to neoliberal institutionalism.

Figure 2: Refined analytical framework.





Even if there is a neglect of non-state actors within the agency dimension, any modification of the dimension is not considered necessary. Considering that only states can enter into agreements of this kind, the parameters states and non-state actors, working as two opposites, are still considered accurate. However, since non-state actors have been shown to play an important role within international institutions, the role of these actors need to be put forward to a greater extent within the theoretical framework. This is why non-state actors have been added as a sub-parameter to states.

With regard to the temporal aspect, the factor time has also been added to the analytical framework as a vertical parameter. The temporal aspect is present in all three dimensions and it is therefore suitable to place it vertically in the analytical framework.

Neoliberal institutionalist assumptions about mutual interests and interdependence can contribute to the understanding of why the Commission has decided to support a transition from the EU ETS towards CORSIA. The above discussion has provided an understanding of actors' belief that cooperation can result in mutual benefits and hence also of actors' motives for entering or forming international institutions. By refining the concept of actors and adding the factor of time to the analytical framework, this brings further light into the Commission's actions. These refined analytical framework provide a better understanding of the logics behind the formation of international environmental institutions, which is the overall purpose of this study. The use of a neoliberal institutionalist framework without the suggested adjustments provides a weaker explanation of the Commission's action. More research is, however, needed to further establish the role of non-state actors within international institutions and to determine to what extent the two schemes contribute to emission reduction. This is an avenue for future research.

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## Appendix

*ENVI committee meeting in the European Parliament*

### **Exchange of views with Ms Violeta Bulc, Commissioner for Transport, on ICAO's CORSIA developments**

Violeta Bulc

Respected members of the European Parliament. It is my honor and pleasure to address you again in this house. Decarbonisation of aviation is certainly a top priority for the Juncker commission since the day one and I do expect that it will remain that way on the political agenda, not only for this Commission but for decades to come. The Commission is firmly committed to the goals of the Paris agreement.

To achieve them we are making an irreversible shift to low and ultimately no emission mobility with a very clear vision zero by 2050. This is also the topic of the EU long time strategy for green house gas emission reduction, which the Commission will adopt at the end of November. Our strategy will go beyond transport and address the EU economy as a whole. So the question is no longer whether but more how? Now turning to aviation, it is both a sector for the European Union economy and an essential means of transport. The growth of aviation is also providing the EU with a consistently growing pool of jobs and helping regional development by attracting activity and investments. But growth for the sake of growth can not be an objective in its self. Aviation has externalities that can not be overlooked. Direct emissions from aviation account for about 3 percent of the EU's total green house gas emissions and more than 2 % of global emissions. CO2 emissions from aviation have been included in the EU ETS since 2012. The system has so far successfully contributed to reducing the carbon footprint of the aviation sector. That is the fact. Operational measures, such as modernizing and improving air traffic management technology procedures and systems are also reducing aviation emissions, and in addition, thanks to new aircraft technologies, cleaner fuels and a renewal of the fleet over time, emissions today are 40 % per kM flown lower than they were in 1992. As you know, CORSIA is the first ever global scheme for aviation. It delivers and builds on the Paris agreement and it also delivers on the aviation strategy as well as the European strategy for low emission mobility. Both



highlighted the importance of an ambitious agreement to tackle international aviation emissions. I was privileged to be in Montreal when the agreement was reached today the European Commission, the EU member states and your selves are working hard to maintain the environmental integrity of CORSIA. That's why, we have put a lot of emphasis on financial and technical assistance to help countries implement the scheme. So far, we have three projects worth a total of 70 million euro. All EU member states have volunteered to participate in the CORSIA pilot phase through the Bratislava declaration. Worldwide 76 states have committed representing almost 76 % of international aviation activities. We should actively work together to help increase the number of participants, India for example, will implement CORSIA's MRV system, and this is a very positive signal.

That being said, it is true that CORSIA falls short of Europe's ambition in some aspects and many uncertainties remain with regards CORSIA's effectiveness. But ETS alone, even with its highest ambition will not be sufficient to effectively address global aviation emissions. Together we must seize this opportunity and if we fail to do so now, we will have years of work. One measure does not exclude the other and I am inviting you to work with us in this spirit. CORSIA is subject to a review every three years and can be reviewed and improved well before the end of the pilot phase. The EU will continue to push for robust and effective rules. The global consensus of CORSIA remains fragile as I mentioned I took part in the final discussion in June this year and I can ensure you that many countries remained reluctant to commit to a measure they perceive as a threat to their sovereignty and an hurdle to the development of their aviation industry. The EU must continue to signal its intent to participate in CORSIA to generate momentum for implementation. Any reservation about CORSIA could jeopardize the whole multilateral progress and the progress made so far. And that is why we are leading by example and already implementing the CORSIA MRV already this year. As you know, discussions are still ongoing with respect to eligible offsets and the sustainable criteria for eligible fuels. What influence will Europe have in this discussion if the EU withdraw its support for CORSIA now. The best way to improve CORSIA is to continue to influence its design within ICAO. The Commission's proposal for the union position to be taken by the EU member states in their reply to CORSIA state letter is full in line with the provision of ETS directive. It is a fact that certain differences currently exist between CORSIA and the EU ETS, we don't hide that. And that is why once all the CORSIA instruments are adopted by ICAO, the Commission will carry out in-depth assessment of the scheme and present a report to co-legislators.

The EU will decide on the basis of that report how to implement CORSIA and what rules should apply on flights within the EU economic area. I am personally convinced we can find ways to combine CORSIA and the EU:s ETS in a way that is consistent with EU commitments under the Paris agreement and does not jeopardize ICAO's efforts in favor of a global solutions.

Madam honorable chair, honorable members, European citizens should be able to travel by air while leaving a minimum footprint. And this is why the future growth of aviation goes hand in hand with sustainable policies. Our objectives is simple, to reduce Co2 emissions from aviation. That is no doubt about that. Together our job is twofold, to obtain the most ambitious deal possible within ICAO with the widest possible international coverage while not jeopardizing the EU ETS for aviation. Once all the CORSIA instruments have been adopted by ICAO the Commission will carry out an in-depth assessment of the scheme and present a report to co-legislators. And I am therefore inviting you to please support this process, so that together we can assure that aviation becomes greener in a very controlled and sustainable manner.

Thank you very much.

Questions from the members of the European Parliament

J. Girling

Thank you madam chair, thank you commissioner for your presentation. I do have a couple of very straight forward and simple observations and questions. I agree with you, and indeed this committee has and the Parliament have gone along with the idea that Europe must lead by example and indeed I guess we think we have been. Maybe where we would departure that we consider that we should continue to lead by example and that means that we need to insist on real ambition within this CORSIA scheme, which nobody I think in parliament has ever pretend is our preferred way of doing things but we have held our oath and said okay we go with it we go with you with your recommendations. But we have always been very clear. And I am now less clear having listening to you than I was before because you said that this CORSIA delivers and builds on the Paris strategy, which I would absolutely disagree with you I do not think it does, because our Paris commitments

can not in my view be delivered by CORSIA. But then you went on and said that it was not good enough and that we need to improve it so I am slightly confused where you think CORSIA is actually going to take us. But given that it is this committee that is responsible for climate change and climate change action I would very politely say that I think that is wrong and that we are not going to deliver with the scheme. However I accept that we say that we will go along with it so I don't understand how we could be in a position where you would recommend that we do not file a reservation by the first of December. When by not doing so it binds us in to accepting the environmental measures in CORSIA and not allowing anything further in other words it gets rid of our own EU ETS for aviation. Now I think it is very clear that that is the case and I have not heard you say that is defiantly not the case so I ask you again why given the uncertainties that you yourself have just acknowledged still exist in CORSIA not least the environmental issues, why will you not go ahead with encouraging that reservation and indeed although while we accept that as a union we have a different legal status we could still put forward a reservation and it would be my belief we should do so and I would ask you to state very clearly why you think that is not the case. Because I have to tell you my recent experience we recently had a trip to China where they laughed at us when we talked about CORSIA and basically said well, we are not doing anything. I recently went to an event in London where I spoke with many people from the airlines and people from DG CLIMA to and it was absolutely clear that it is the absolute intention of everyone else involved in this to make sure the EU does not continue to reserve its position on the EU ETS. And I think it is absolutely essential that we do so, so please can you tell me why we are not going to do so by the first of December.

S. Dance

Thank you commissioner for outlining your thoughts, obvious we agree a lot with what just has been said, particular the fact that this level of ambition that we know of in CORSIA is far from sufficient for meeting our climate commitment on the Paris, but of course everything that has also been said about the need for this place to demonstrate the highest possible ambition in everything we do when it comes to climate. And of course there is a simple principle here that the review that will be undertaken by the Commission into the effectiveness of CORSIA, we should not of course pre-judge that review. And that is why I agree a reservation is necessary. I am just a little bit confused because I thought that you were proposing a reservation but I could have got that

completely wrong and my two questions are really, I mean I agree completely, reservation is necessary, it would be great if you could clarify your position on that, but secondly why we waiting into the very last moment on these things, I mean the first of December is not very long, it has been a lot of industry pressure to make sure that decisions on a reservation are delayed, delayed delayed until practically it is impossible to implement. And that is one of the fears that I have now, which is that even if it were possible within the council to get that reservation ratified is it even legislative possible, with the time frame that we got?

Thank you.

B. Eickhout

Given a bit the quite fundamental issue of the questions, I would like to have an answer before we continue, because I think everyone wants to know very clearly, I mean there is a letter of intent on the table as far as we know, so as far as we know the commission is pursuing that that before the first of December we will come to that, to that position. That would be good to hear then we can continue the discussion, otherwise we are probably asking the same question.

Violeta Bulc

Okey, I need to be very careful what I am going to say now, because we have discussed this very often and as I said many times is that we have adopted our proposal which clearly states that there is differences between CORSIA and EU ETS. And I think that EU member states will be filing their differences by the first of December, so what I want to say, is that this is not, the conversation is not over yet. And we have been very much involved in a discussion with our colleagues from CLIMA, with you from the parliament, and also and of course taking a close look at the analysis that have been made in order to proceed with enough level of confidence into this negotiations. Studies show us that in 2021 to 2035 ETS will sort of cover 956 empty CO<sub>2</sub> emissions. When if we take a look at the CORSIA that in the similar period, in the same period, will represent 2711 empty [CO<sub>2</sub> emissions]. So for me, this is a huge motivation in order to get CORSIA onboard. And, I understand in a way frustration because we believe we have a better system than that the world wants to commit to. But the pollution does not know the borders, and for me it is a

huge motivation to get the world behind the commitments in order to get the global effect going. You say that China already said that they are not joining. I would be cautious in making statements like that. India was very much reluctant and now we see a very concrete step by India. If China makes a step and of course they will do it in their own dynamic, and well if Russia reconsider their position, then I believe we will have a very concrete deliverables on the climate agenda.

I have never said that we will commit with no conditions. I ask for this parliament to stick with us until 2021 to see how much we can bring onboard, how many member states will actually enter the voluntary phase. As you know we are close to 90, and because of the technical reasons, administrative I should say, China asked to be removed from the list of voluntary participation. I still hope that they will come back. And I do hope that India will come onboard fully, specially because of their very committed climate agenda that is emerging now on a monthly basis. Again, we will not commit for every price, but if there is a hope we can get a solid global agreement going, this will on a global scale contribute to climate change by fare more than just the EU ETS. But as you know, we working with our colleagues from CLIMA, to align these two mechanisms, and I know that we will be with you, communicating with you on every single step that we are going to make or commit. So again, I know the emotions towards the ETS, I wish we could isolate ourself and say we are going with our model, we would ensure clean air for Europe, but we wont, because if we don't get global agreement, if with we do not get global commitments, pollutions will still come to European airspace.

M. Demesmaeker. (translated)

Yes,

I speak Dutch.

Madam Commissioner, we have heard that you have been prudent, but I have to say al of this is a bit like the Delphi oracle at the moment, non the less I agree with those that have spoken already in this committee and indeed in the transport committee we have often talked about this particular issue and as you have already pointed out, the aviation sector accounts for 2 percent of global Co2 emissions and 3 percent of European emissions overall. Now, achieving our climate goals is hugely

important, I think we all agree so, it is clear that we need to talk about this sector, but nine days before the deadline the Commission's slowness and indeed sluggishness is something very worrying and the same holds true of Council. They are really dragging their position because if we introduce any reserves on CORSIA by the first of December, European EMTS will be completely undermined. And as far as European Union has concerned this would be a very definite step backwards. I have seen studies that indicate that CORSIA does not provide enough guarantees in terms of achieving our climate goals. You have also said that no commitments would be made without any conditions, but equally I hear doubt in your voice when you speak, I mean why are you not apply some pressure here Commissioner? When you first took the floor, you said that CORSIA and the ETS could be combined, could you run that by us, how is that going to work, how are you going to combine these two systems? There you go, I leave it with that.

G.J Gerbrandy

Yes thank you madam chair, and I am afraid I share the same confusion as a few others. For me this whole CORSIA process has been like sailing through xx, it is closing between two evils. Going with CORSIA is one way but we know that it will by far be sufficient to get where we want to to be within the Paris agreement but not doing CORSIA and going alone might take us even further away from Paris. So that is the very difficult choice between the two. One thing for me is absolutely clear, that European member states that are active within CORSIA should have a unified position and they should before the first of December, coordinated by a strong European Commission, show their decent with the way CORSIA is being applied now and risking that the ETS system will never be used next to the CORSIA system so I think that is very crucial and that is something that I look forward to further answers from the Commissioner. My second point that I would like to make is more focusing on the airline sector but also there I think politicians play a crucial role. There is something I simply do not understand, and that is why the sector is shying away from all their responsibilities. What they actually doing is gambling on our weakness that the only model is growth growth growth, and of course using cooking oil is wonderful but it is by far not sufficient to have a clean airline future. So they are actually gambling on our weaknesses that in the end we will never say no to further growth of the aviation sector. I think that is a gamble that shows a complete lack of responsibility, something I don't understand why is the sector not taking more responsibility. We have four billions airline passengers every year now and it is going to double in the coming 15

years, to 8 billion. Why doesn't the sector take an initiatives for instance by asking 1 euro for every airline passenger. That means 4 billion euro per year now. And 8 billion euro in 15 years from now in creating a huge innovation found. Because the only solution to grow in the aviation sector is developing clean airplanes. And the only way to get there is by breakthrough technology, by spending a huge amount on innovation. It can not come from the public sector it has to come from the private sector as well. So my plea is, why don't we force this sector much more strongly to go into that direction and that is something I ask the commissioner as well. Talk to them and show them their own responsibility, and that in the end we will not be as weak as they believe we will be. Thank you.

B. Eickhout

Thank you madam chair, thank you Commissioner, it is probably going to be a bit boring but I feel that everyone in the environment committee having the same questions. I thought that the situation was quite straight forwards. The Commission having looked at the SARPS that having been concluded. We know one part is concluded, the other part is still on going. But that until now what has been concluded is not giving enough clarity on the environmental integrity of CORSIA. Because we don't know the offset rules are not agreed yet. The exact definition of what are alternative fuels is not defined yet. And it is quite crucial those offsetting rules for what we are going to do in CORSIA. So, the provisions are not clear yet for knowing whether CORSIA will have enough environmental integrity. And that is quite crucial in order to judge whether we go with our ETS system for all flights or not. But we need to judge that and we cant do that. So you have to make a reservation. And for now, that reservation, at least a proposal, is also on the table. And can I also there make a point on transparency. Still, formally that proposal of the Commission for a Council decision is not on the table. It is not being presented to the parliament formally, although we all have it because of Politico. So it is out there in the world, everyone has it, we talked about it, but formally the Commission is not sending it to us. This is a total ridiculous situation and that is really something that needs to change very quickly. But that is one part, then on the contents, I thought okey my main criticism would be the SARPs where agreed in June, why did it take so long to come up with a council, at least a proposal for a council decision, but we have until the first of December so lets work. To get to an EU position. Because you know, no matter what will happen that weakens if we go into a several directions. Where some member states would put a reservation

and others don't. If you want to make us useless, pursue that strategy. I thought you were not. But now from your answers, I get the feeling that yes there is a text out that that is proposing a council position, but you are not really pursuing anything after that so the text is out and you just hope that 28 member states known for getting to a common position very easy on anything, they will just do that on this one. Without any clear guidance of the commission. I thought you are going to come up here with a strategy how the member states will come to that council position so that we have a strong reservation for the concerns on environmental integrity, knowing that we have a strong voice in the further negotiations. And now the answer is difficult, "I have to choose my words very carefully." "I do not know what exactly I can do." Well then the outcome is that Europe will be divided and no matter what we will look weak in the further CORSIA negotiations. And that really surprises me. Why this change of strategy, are we still pursuing one position and how are you going to do that so in order to have one position before the first of December and let me please be that this reservation that we have all have seen. I think I limit it to here, I had a lot of questions of the followup discussions but I think for now, these have become the key questions.

Violeta Bulc

Respectful members of the parliament, the confusion is on my side because when I hear your comments it is like you have not been part of the entire process from the beginning until now. That is where my confusion comes from. Because I have to choose my words very carefully because I don't really know if you remember that we walked this path together. All the way. And it was very clearly stated that we are not in favor of reservations but differences that we will clearly state, what is the difference between ETS and CORSIA. And I am confused with your comments and your statements. Because it seems like we have been living in two different parts of the world but we walked the path together. I have been very clear in my communication from the day one. We want global deal because global deal will bring by far more benefits than a European deal. And now we are not filing a reservation because we are filing differences. And it seems like you, I mean, now I am not sure if you received the documents or not on your table. Have you received the documents? Do you see what we propose, what is the Commission proposal what is the Council proposal? Now I am really confused because of that. So maybe we should clarify, do we have the same documents on the table? Because this will really safeguard the EU ETS legislation. And this is what the August proposal and the council proposal and what they will be deciding on. I really would like to recall what we agreed on. We agreed, or I asked you for the



support to stay with us and to lobby as much as you can on your own, through your own channels, the same as we where, to get as many countries as possible on a volunteering base by 2021. If you are not going agree with the results of negotiations, we said that we going to come back and decide on ETS or CORSIA. But we are negotiating, we are not even halfway through. The most important part of negotiations is coming in march next year. Two out of three have been agreed on last week and one more is left over for spring. And again I will be very straight forward. I am agains filing the reservation, I am for stating the differences very clearly on ICAO level and making sure that they understand under which conditions we are entering this deal. But if EU shows weaknesses, if EU is not leading the way, then it is quite likely that this will not happen. We can for different reasons step away as the US did for the time being. Or we continue to motivate, I am in favor of dialog and persuasion and showing the way how the growing the countries that will of course grow their aviation even much faster than EU because they are just about to establish the middle class and the middle class wants to travel. You know who I am talking about, I am talking about China, I am talking about India. And that is why the Commission is pushing so much for new technologies as well. We are encouraging and now co-financing the hybrid plane that we can actually get maybe the planes that do not pollute. Electrification, hybrid proportion systems and this is probably the way how we can also address these challenges. In Europe as you know we trying to lover the impact of aviation by supporting the high speed trains up to the five-six hundred kilometer distance. And we will continue to do so, to reduce the need for aviation. But as far as the decarbonization scheme is concerned, I would certainly like to feel your support in order to continue to negotiate very firmly but with a very honest commitment to get a global deal going. Again, the figures and statistics show it self. If we are alone and just push for ETS the results will be by far smaller and weaker than if we get a global deal going. Even if it is not going to be 100% in accordance with our demands. But we will get credibility to continue to move, to continue to push for decarbonization. If it is anybody, I am very much in favor of decarbonization of transport. And we have done a lot and we will continue to fight, you see what kind of incredible move was maid in IMO. And now aviation is challenged because IMO is much more ambitious now than ICAO and we will try to use that and get the leverage and get ICAO to move as well. So again, I hope that you have the proper information on your table and that we do deal with the same type of documents. Because that is where my confusion started to come from. That is why I said that I had to be very careful with what I said because I did not understand even your comments. I really apologies for that.

Thank you madam commissioner. I welcome your ambition on aviation emissions. Now, in talking about conferences about climate change keynote speakers always say that the xx for decarbonization is tighter we need to get on with it if we want to achieve it. In a meeting of the trilateral commission in Ljubljana I was able to hear experts talking about an aviation revolution and they felt that we need to be active on a number of fronts. We need to promote electric planes, hybrid planes. But plead that decarbonization is still going to remain a very serious issue on the agenda for a number of years. Now, obvious, I welcome measure such as CORSIA but making this voluntary is really quite problematic. This voluntary nature is suppose to last from 2021 to 2026, you actually talked about a number of different processes. But given that, would it not be a good idea to accelerate this, how can we get more dynamic into all of this?

C. Zorrinho

Thank you vey much madam commissioner. I think some of the confusion you mentioned is down to the completely different tone that we heard from you, the tone in your introductory remarks in the one hand and contrast that with your reply to MEPs. Now, your presentation, your initial presentation was one where you expressed your concerns, you referred to the unstable and voluntary nature of this system that it is insufficient developed that the European response needs improvement. But then, MEPs asked you question, and you said yes European countries where in fact going to show a consistent front to obtain better results and so forth, but we got to back that up with facts, we can not just wish it into happening. We know that the European Union has been hugely ambitious, that is only the case in the European parliament, we have done a lot on road transport, on rail transport, so aviation and maritime transport can not be the exceptions. So we need clarity. What is the alternative strategic line. What can I, as an MEP say to people back home? What can I say to the media back home? How can I say that there are guarantees that member states will have a strong position, that we will lead by example and also be united on the basis of the position, you are mentioning the United states, and I like to ask you whether the United States are or are not our allies in this whole process. Thank you.

Thank you madam chairman, Commissioner. Well there are very different assessment on what CORSIA can and does achieve, I would urge you to read parliament text on this. We believe CORSIA is really very weak and that the way it is shaped it is not entirely down with what we want. Well, saying that is actually not accurate, there is only about 20 percent of it that is in line with what we want. And what you have is not clear at all in comparison to EU ETS which works. So, I think you have got to be careful with what you said in terms of the results of CORSIA once. As J. Girling said we are in favor of in so far of it is a beginning, but only because of that, it is an initial step, but it is not acceptable if our rights as EU legislator for EU ETS are limited. We got a bit confused on this. We don't have a document. So the question is why don't we have a document? It is not you who should ask us why have we not read it, it is we who should ask you have we not got the document? You cant criticize us for not reading a document not made available to us I am terrible sorry but that just is not good enough. You want to chose the best legislative instrument that will guarantee the European Unions ability to decide and that of course is crucial for the European parliament. But okay, we have a reservation fair enough. But if you say that the legal instrument you have chosen is the one xx just say so. I mean let's not beat about the bush. If we got the right legal instrument and it is well grounded than we have grants to be assure, I urge you, in your discussion with the member states, to make the following remark. We need more measures on CORSIA if we are to deliver on our Paris commitments. It is an international agreement to which we are committed. And please, I would urge you to spell things out to member states, if we don't have a proper legal instrument by the first of December, and if the EU is able to decide whatever they want on EU ETS then we have got an EU institutional crisis on our hands. The European Parliament has been in favor of this, of EU ETS. You can not ignore the European parliament, and that has got to be understood. If the member states are delaying or downfolding, you need to do a bit of persuasion. Thank you.

J Guteland

Thank you chair and thank you madam commissioner for being here and for your presentation. I want to raise questions about the EU climate target 2030 and in relation to the CORSIA and how it will be affected. Because I believe and it has also been a statement in a resolution in front of COP24 that we must raise our ambition when it comes to our 2030 targets, and now I am also a bit worried

here. Because given that EU has committed to meet its 2030 target without relying on international credits, how will the Commission propose to avoid that any potential implementation of CORSIA undermines the 2030 objectives with credits that can not be taken into account in the measurements of the unions progress towards its climate targets. And I also want to ask given that the ICAO target of net 2020 is substantially weaker than the EU at least 40 percent target, how will the Commission propose to avoid that any potential implementation of CORSIA undermines our target. Thank you.

A. Schreijer-Pierik (Translated)

Thank you. I am not going to put any questions for the commissioner, but madam Commissioner would have liked to put a question we have been talking about the climate agreement in the Netherlands, now we are going even further than what Europe has decided to do. We have got all the sectors, we talked with all the SMEs, farmers, with very important objectives and this is what we do in the Netherlands so what is happening and what are the requirements and the rights of the aviation sector and that other sectors, I can actually not explain what additional rights would be and this is what we need to answer today. Because the requirements laid down on other sectors are extremely difficult. And when you take a look at the sky and see requirements are not the same everywhere, then I don't know what to answer, so we need clear figures to show that things are moving forward. Thank you.

G. Meissner

Thank you very much chair, thank you very much Commissioner. Since time is advance I try to be short. In my questions, first question. All you said that ICAO is not as ambitious as IMO right now, IMO is faster that was unexpected. What can be don to accelerate ICAO? Can it be done through member states? Or through aviation agreements or whatever? And to next question, how many countries are already part of it voluntarily and can that be pushed for example by aviation agreements? Because this is a method that we have maybe to talk with other member states, with other countries over the globe to join this movement and then another question because you talked about innovation, there is several things in place, you mentioned hybrid planes and there of course it is only plans as far as I know only, to have electricity for the taxiing on the airport. I hear about that for a long time but I did not see it yet so is it you to have it in the market and how much time will

there be needed in order to have it really and for example algae is a biofuel for aviation, now without emission discussed for a long time but not yet there, do you know anything about these innovations because that is very important to push it forward as well. And just a comment if you would have a single in European skies in Europe much things would be better but we don't have it yet and we can not change it I know.

Violeta Bulc

Thank you very much also for all this comments and questions. First, because there were several half questions on technology from several of you MEPs. Allow me just to explain that we have several initiatives already ongoing, besides this is our of course that is taking care of the optimization of the aviation space and its more efficient management. We are investing a lot now in new technologies, through clean skies but also through other instruments. One of them is undertaken now by Rolls Royce I believe plus their partners to develop the hybrid propulsion systems which would of course bring a completely different type of quality to aviation. This take time, they said that they will deliver by 2030. So, if that happens, we can of course count on a new generation of airplanes also on a service level. In general aviation and small planes and drones, for example drones in particular we are already put into legislation that they need to be zero emission. Flying cars or drones which ever we will use. So can we speed it up, yes we can if we can have a bit more resources, so let's hope that the Commission's proposal for the next financial period will be accepted as soon as possible and we can engage immediately with the new programs. Where in transport, decarbonation represents for the new financial period over 60 percent of all investments. And that will touch also the aviation. I am hoping that, as I already mentioned, that we will be able to develop new artificial fuels, we are pushing aviation biofuels. But all together, it will not deliver on a vision zero by 2050 so they will have to be the emerging of something new that will contribute to the overall vision zero agenda. So that is why I count on innovation. I am glad that transport got much larger, at least we proposed much larger amount of investments in innovation in transport in the new financial period. I can only hope that this house and the council will agree with us. Then the emergence of new will happen even faster.

As far as the different other option how we can deal with aviation and I have heard the questions regarding also the taxes or the way how its compare to other modes. In this formal council, in December 3, we will give two member states the preliminary report on our really full fledge analysis of all taxes in all modes in all member states, and that will give us a much clearer picture about the position of aviation in an overall multimodal environment. A complete analysis per mode per member states will be complete probably by March/April next year. But I can share with you, in the same manner as we will share with the council, the preliminary report which is already showing some very concrete results, but I can not talk about the yet because we are in the final phase of putting everything together. So that will give us hopefully some additional chance to follow up also in aviation with other means. Regarding this document. If I was, maybe I was informed incorrectly I can take that as a part of it, but I was told that the document was submitted to you on the 31 of October. That all of you got the new version of the document, the one that I am referring to. And the fact is that I would like to re-stress that you will see in this document that we made the proposal to safeguard the EU ETS, also against legal challenges. And that is another element that was very much on our mind when we proposed that instead of reservation we focused on differences. And point out these differences and then of course bring them together, this our intention, to bring together ETS and CORSIA. I also like to say that whatever we agree will not go into force before 2020. That gives us enough time that we do a thorough impact assessment analysis of the full scheme. Which of course at this point we still not know what is going to exactly be, but we will continue to negotiate and hopefully in march we will know and once this is adopted, we can then do the analysis, we can do the impact assessment and we can follow it through and of course report back to you and to the council about the results, how do we foresee them, the development of Corsia net effects. So this is what you where asking us for and we will of course certainly do it.

When you asked me how can you help, let's not forget that we have 8 seats in ICAO, 8 out of 46. So how can you help, lobby with countries that have not decided to join us, help us to lobby with them. We will certainly continue to do so. And I believe again if we can get India fully onboard and the way how they are communicating and the way how they are committing themself to green agenda, I believe that there is a hope. And if we can hold the space that China decides to come onboard as well I think we can be very successful in this approach. But of course it is not a done deal yet, I fully agree with you, so we need to continue to fight, continue to persuade, continue to intensify our discussion and negotiation. And again, we will not comply with any deal, we where very clear with

that. And every time at ICAO in Montreal, to everyone, we say that very clearly. We need to have an ambitious deal in order to deliver concrete results, but let's give the global deal a chance.